November 1, 2006

Mayor Mark Chilton               Mayor Kevin Foy               Chairman Barry Jacobs
Town of Carrboro                 Town of Chapel Hill           Orange County
301 West Main Street            405 Martin Luther King Jr. Blvd.    Post Office Box 8181
Carrboro, NC 27510              Chapel Hill, NC 27516             Hillsborough, NC 27278

Dear Mayor Chilton, Mayor Foy and Chairman Jacobs,

Enclosed is our quarterly report for July through September, 2006. We believe that this summary of recent and upcoming activities reflects OWASA’s commitment to a high level of customer service and environmental stewardship, efficient management, affordable rates, and community collaboration to which you and our customers are entitled.

Please feel free to contact me or our staff if you would like an in-person presentation or further details about any of the items in the enclosed report.

Sincerely,

Michael A. (Mac) Clarke, Chair
OWASA Board of Directors

Enclosure

C:  Mr. Roger L. Stancil, Chapel Hill Town Manager (w/encls.)
    Mr. Rod Visser, Interim Orange County Manager (w/encls.)
    Mr. Steven Stewart, Carrboro Town Manager (w/encls.)
    OWASA Board of Director (w/encls.)
    Ed Kerwin, OWASA Executive Director (w/encls.)
Quarterly Report to Local Governments
November 1, 2006

OWASA’s September 6, 2006 Annual Report to Local Governments summarized major accomplishments and activities for Fiscal Year 2005 (July 2005 – June 2006). This more abbreviated report provides new or updated information for the most recent (August – September 2006) quarter. Additional materials are available on request. OWASA Board members and staff will be glad to provide presentations if desired.

Water Supply – Reservoir, streamflow, and demand patterns remain good as of the end of October. The likelihood of our supplies declining to critical levels within the next 18 months is very low.

OWASA/UNC Water Reclamation Project – The next community meeting to review the route of the reclaimed water transmission main and Meeting-of-the-Waters Creek sewer line in the Pinetum-Fern Lane area is scheduled for November 1, 2006. (There is no further news on this project since the September 6, 2006 Annual Report.)

Public Hunting on OWASA Land – On October 26, OWASA and the North Carolina Wildlife Resources Commission (WRC) entered into an agreement that allows OWASA to continue its no-hunting policy at the Cane Creek Reservoir, but will allow limited hunting on the mitigation land. OWASA purchased the mitigation land in 1980 to replace the natural habitat area that was affected by construction of the reservoir and dam.

The WRC staff stated in April, 2005 that under the US Army Corps of Engineers’ permit for the Cane Creek Reservoir project required that public hunting be allowed at the Cane Creek Reservoir and on the mitigation land. The OWASA Board disagreed, and in July, 2005 asked the Corps to change the permit to resolve this matter, in part because of the significant wildlife habitat benefits provided by the Reservoir, mitigation land, and more than 1,500 acres of land and conservation easements acquired in the Cane Creek watershed.

The Corps advised OWASA and the WRC to hold further discussions to reach a compromise. OWASA is pleased to have resolved this matter in a way that we believe addresses public safety concerns of our neighbors through hunting limitations, a 300-foot setback requirement, patrolling and continued work with the WRC.

Rate Study and Strategic Financial Review – The ongoing study of customer rates and fees remains on schedule for completion this winter.

Mason Farm Wastewater Treatment Plant – The overall construction project remains on schedule for substantial completion by summer 2007.
Elimination of Objectionable Offsite Odors from the Mason Farm Wastewater Treatment Plant (WWTP) – OWASA submitted its annual progress report on meeting the off-site odor elimination goal in January 2006 per requirements of the Town’s Special Use Permit as amended in 2004. Our staff met with nearby residents on January 31, 2006 to discuss plans for the odor study and on September 27, 2006 to discuss the draft odor study report including information developed to date by our consultants, Black & Veatch. The next step will be discussion at an OWASA Board meeting on November 9, 2006. OWASA staff expects to make recommendations for odor elimination improvements in addition to those already planned.

Land Application of Biosolids – OWASA’s practice of applying liquid biosolids (highly treated wastewater sludge) to agricultural land has become limited by weather conditions, cropping schedules, availability of land, increasing biosolids volume, transportation costs, and other operational factors. Several emerging issues and trends could affect the future viability and capability of this management approach and suggest the need for a more diversified program. A draft Biosolids Master Plan is scheduled for completion in 2007. It is unlikely that any further discussion of land applying OWASA biosolids to land within the Cane Creek or University Lake watersheds will occur before the Biosolids Master Plan is completed next year.

Capital Improvement Projects – Capital projects to improve the reliability of OWASA water and sewer lines in Carrboro and Chapel Hill are proceeding as described in the September 6, 2006 Annual Report to Local Governments.

Carolina North – OWASA is represented on the University’s Carolina North Leadership Advisory Council (LAC) by Vice Chair Randy Kabrick. Staff will participate in the Carolina North Infrastructure Workshop scheduled for November 6-8.

Annual Update of OWASA’s Comprehensive Water and Sewer Master Plan – OWASA staff has updated the 2001 Master Plan with recent data, strategic trends, and commentary (October 2006). Principal findings include:

- OWASA water sales and reservoir withdrawals for the past five years have remained below the historically high levels observed in 2001. Reduced consumption is likely due to a combination of weather factors and water conservation efforts by customers across all user categories. Reduced reservoir withdrawals also result from the recycling of water treatment plant process water that began in the fall of 2002. Process water was previously released to an intermittent creek. Water withdrawals from University Lake and Cane Creek are 23 percent less in 2006 than were projected in OWASA’s 2001 Master Plan.

- Substantial reductions in summer peak demands at the Jones Ferry Road Water Treatment Plant continue to indicate that customers are using less water outdoors (irrigation). We believe this is a response to OWASA’s seasonal rate structure and
to year-round standards in the Carrboro, Chapel Hill, and Orange County conservation ordinances.

- A continuing trend of lower peak flows at the Mason Farm Wastewater Treatment Plant during rainy periods suggests that OWASA’s long-term program to systematically identify, repair and replace older sewer lines is successfully reducing the unwanted inflow and infiltration of stormwater into the sewer system.

- Lower peak demands at both the water and wastewater treatment plants will delay the need for costly future expansions.

- OWASA’s projections of future demand are based on the approved comprehensive plans of Carrboro, Chapel Hill, and Orange County and reflect the most up-to-date information available regarding new development proposed for the University’s Central Campus and Carolina North. Local rezoning decisions that are consistent with existing comprehensive plans are not expected to affect OWASA’s demand projections. Additional development density can be accommodated within the scope of OWASA’s current plans if highly efficient water conservation technologies are implemented in new development projects. We are working with local government staffs to develop collaborative approaches for increasing water use efficiency in our service area.

- The existing reservoir/quarry water supply system and its future expansion can meet the ultimate buildout needs of the Carrboro/Chapel Hill/University community. However, if projected demands are not reduced further and/or additional water supply sources are not developed, the community will become more vulnerable to severe drought conditions beginning around 2020 until the Stone Quarry expansion is available for water storage in the early 2030s. The primary goal of OWASA’s long-range conservation program and the reclaimed water system project is to reduce water shortage risks without having to rely on additional water from Jordan Lake.

- Water quality in OWASA’s University Lake and Cane Creek Reservoir remains good, but not pristine, as indicated by periodic blooms of blue-green algae, especially in University Lake. Both reservoirs remain sensitive to nitrogen and phosphorus nutrient inputs from their respective watersheds. Bloom conditions appear to be aggravated by prolonged summer periods of high temperature and low streamflow.

- The ongoing $50 million upgrade and expansion of the Mason Farm Wastewater Treatment Plant will be completed in 2007. New and upgraded treatment units have improved the quality of the water released to Morgan Creek, increased plant reliability, eliminated odor problems, and enabled the reuse of treated effluent to meet certain non-drinking water needs. The new filter complex and ultraviolet light (UV) disinfection systems are in service, but the filters are not yet being operated to remove nitrogen from the wastewater. The expansion to 14.5 million gallons per
day (mgd) will provide additional capacity to serve new development anticipated by Carrboro, Chapel Hill, and the University.

- OWASA’s practice of applying liquid biosolids (highly treated wastewater sludge) to agricultural land has become limited by weather conditions, cropping schedules, availability of land, increasing biosolids volume, transportation costs, and other operational factors. Several emerging issues and trends could affect the future viability and capability of this management approach and suggest the need for a more diversified program. A draft Biosolids Master Plan is scheduled for completion in 2007.

Printed copies and supporting graphics of the full update report are available on request from OWASA and will be available on our website at http://www.owasa.org/pages/MasterPlanRev06.pdf by mid-November.
OWASA’S ODOR ELIMINATION PROGRAM
AT THE MASON FARM WASTEWATER TREATMENT PLANT (WWTP)

As discussed below, we believe the completion of a new, enclosed “headworks” next summer will be an important milestone in odor elimination at the Mason Farm WWTP. The headworks is the area where wastewater enters the treatment plant. Our consultants’ odor sampling at the WWTP in June, 2006 showed that the headworks has a daily pattern of elevated odor from the late afternoon through early morning due to hydrogen sulfide levels in wastewater entering the plant.

On September 27, 2006, OWASA representatives and consultants met with sixteen of our WWTP neighbors to discuss a draft report by our odor consultant, a conceptual draft of a proposed definition of successful odor elimination and related items.

OWASA staff will make a report and recommendations to the OWASA Board of Directors on Thursday, November 9th regarding near-term odor elimination improvements identified by our consultants. The 2006-07 OWASA budget includes $300,000 for the current odor study and odor-related improvements in addition to those already planned or underway.

**Background**

- In March, 2004, the OWASA Board of Directors formally adopted a goal of eliminating off-site objectionable odors from the Mason Farm Wastewater Treatment Plant.

- In May, 2004, following approval of a Special Use Permit Modification by the Chapel Hill Town Council, the Pizzagalli Construction Co. began a three-year, $50 million improvement project at the Mason Farm Wastewater Treatment Plant. The improvements include odor-related modifications, expansion of the plant’s capacity, enhancements in wastewater treatment processes and additional back-up power to increase our operating reliability during storms and other conditions.

- In the spring of 2006, OWASA retained the firm of Black & Veatch to do an odor study at the WWTP. This study will help in developing a definition of successful odor elimination and will provide information about odor solutions at other treatment plants like OWASA’s, as well as providing recommendations for additional odor control improvements by OWASA and related technical help.

**Recently completed work**

- In September, a contractor completed the installation of new, aboveground pipes to carry foul air away from our solids digesters. The old, underground pipes were subject to blockages that resulted in odor releases.
“Headworks” improvements to be completed in summer of 2007

✓ Our contractor has begun work on and is scheduled to complete a new headworks facility by the summer of 2007. The new headworks will be enclosed, and foul air from it will be treated in our odor scrubber.

This work is now our highest priority for odor elimination and we expect it will be a major step forward in successfully eliminating off-site objectionable odor.

Evaluation of additional improvements

Based on odor sampling results and related information to date from the consultants, we plan to make recommendations to the OWASA Board on November 9th regarding the following improvements:

✓ covering the exposed holding tanks at two pump stations in the interior of the WWTP site, and

✓ covering devices called “splitter boxes” where wastewater from the headworks is channeled to and from solids settling tanks called “primary clarifiers.”

Communications with customers

We held a community meeting on September 27th as noted above. Attachment 1 summarizes the key comments received from WWTP neighbors and our responses.

Attachments 2 through 4 summarize odor reports we received from WWTP neighbors from 2002 through October, 2006; individual odor reports in September and October, 2006; and our communications to stakeholders in the last two months, primarily by e-mail.

Attachment 5 is the current list of customers to whom we send notices by e-mail.

We continue to maintain a Hotline, 537-04376, for reporting odor from the WWTP and getting project status information.

Conclusion

Successfully eliminating objectionable off-site odor from the WWTP is a process that involves fresh evaluations and feedback from the community as key actions are completed. We remain committed to the odor elimination goal as we work to continue moving forward diligently and cost-effectively.

We look forward to additional discussions with WWTP neighbors and other interested stakeholders including Town representatives. We welcome any comments on this report and would be glad to respond to any questions.

John W. Greene, P.E., General Manager of Operations
Attachments:

1. Summary of Community Meeting on September 27, 2006
3. Log of dates and times of calls and e-mails to OWASA by neighbors reporting odor in the Mason Farm Wastewater Treatment Plant area, September-October, 2006
4. Log of e-mails and a letter from OWASA to neighbors of the Mason Farm Wastewater Treatment Plant, September-October, 2006
5. Distribution list for OWASA e-mails about odor releases from the Mason Farm Wastewater Treatment Plant, and related items
MEETING SUMMARY

COMMUNITY MEETING ON SEPTEMBER 27, 2006 REGARDING ODOR ELIMINATION AT THE MASON FARM WASTEWATER TREATMENT PLANT (WWTP) AND RELATED ITEMS

7:00 – 9:00 PM, Wednesday, September 27, 2006
Community Room, OWASA Administration Building, 400 Jones Ferry Road, Carrboro

PARTICIPANTS

WWTP Neighbors

Ann Alexander                      Peg Parker
Barnes Bierck                      Gary Richman
Reed Johnson                       Gail Wood
Seth Kingsbury                     Kathy and Ralph Abrahams
Helen Ludwig                       Mark Witcher
Alice Neebe                        Betsy Malpass
Abraham and Elin Nussbaum

OWASA and consultants

Mae Clarke, Chair, OWASA Board of Directors          Walter Gottschalk, Wastewater Treatment and Biosolids Recycling Manager
Ed Kerwin, Executive Director                   Randy Foulke, P.E., Project Manager, Black & Veatch
Mary Darr, P.E., Operations Engineer/ Project Manager for the Odor Study
John Greene, P.E., General Manager of Operations
Mason Crum, P.E., Director of Engineering and Planning
Greg Feller, Public Affairs Administrator

Sock-Hoon Koh, Black & Veatch
Pete Schuler, Brown & Caldwell

BRIEF BACKGROUND

On September 12, 2006, OWASA staff invited the neighbors of the Mason Farm Wastewater Treatment Plant (WWTP) to a community meeting on Wednesday, September 27th to discuss the odor elimination program at the WWTP.

On September 19, OWASA staff sent e-mail to several dozen WWTP neighbors with a summary of a draft report by Black & Veatch and a conceptual first draft of a proposed definition of successful odor elimination at the WWTP.
SUMMARY OF KEY COMMENTS BY CITIZENS
WITH RESPONSES BY OWASA STAFF

DEFINING SUCCESSFUL ODOR ELIMINATION

1. OWASA should not just control odor, but eliminate it.

   Response: OWASA expects to complete very important odor elimination improvements by the summer of 2007 as further described in item 4 below. Additionally, the OWASA staff expects to make recommendations to the OWASA Board of Directors on November 9th for further odor elimination improvements to be completed in the near-term (schedule to be developed). The OWASA staff and consultant believe that the combination of these planned and newly proposed improvements will greatly reduce the potential for objectionable off-site odors.

2. The draft odor elimination standard allowing up to 20 odor events per year is not acceptable. OWASA staff’s proposal did not include a statement of consequences for violating an odor elimination standard.

   Response: As discussed in previous community meetings and with the Chapel Hill Town Council, it is not realistic to expect perfect elimination of odor. OWASA will therefore continue to work with the WWTP neighbors to develop a practical definition of successful odor elimination as part of our overall approach including additional improvements at the WWTP. OWASA staff understands that the draft proposal for up to 12 planned odor releases and up to 8 unplanned odor releases per year is unacceptable to the neighborhood. OWASA staff will do further work on a proposed definition for successful odor elimination with the benefit of additional information to be provided by our consultants as noted above.

3. The definition of odor elimination for OWASA should be based on a comparison to similar WWTPs that have successfully eliminated odor. OWASA should examine best practices for odor elimination in the WWTP industry.

   Response: We agree. Black & Veatch’s draft report will be revised to include:

   ✓ An inventory of WWTPs which are to similar to OWASA’s and which are “best in class” in successful odor elimination. This additional research will include plants in addition to those listed in the draft report from Black & Veatch.
   ✓ The actions taken at those WWTPs (“best practices”) to successfully eliminate odor.
   ✓ The standards or measures used at these plants to determine successful odor elimination.

ODOR SOURCES

4. Odor in Highland Woods is often bad at night.

   Response: The odor monitoring done this summer at the WWTP showed a regular pattern of elevated hydrogen sulfide in the incoming sewage from the late afternoon until the early morning.
**OWASA’s highest current priority for successful odor elimination is replacing the present headworks with an enclosed structure** where foul air will be captured and transferred to our odor scrubber for treatment. Replacing the headworks was planned during the WWTP project design process in 2001, and we believe that completion of the new headworks in the summer of 2007 will be a major step toward odor elimination.

We have been adding hydrogen peroxide to wastewater at the headworks since August, 2006 in an effort to reduce odor there. Before then, we added peroxide at the septage disposal area upstream of the headworks, and the peroxide was then carried in wastewater through the headworks.

The odor study work by Black & Veatch this summer identified the headworks, “splitter boxes” which channel wastewater to tanks called “primary clarifiers” and the pump stations in the interior of the WWTP site as odor sources to be addressed. The current OWASA capital improvement budget has $300,000 for odor elimination improvements. OWASA staff is assessing the potential additional odor elimination improvements discussed in the consultants’ draft report and expects to recommend additional odor elimination improvements to the OWASA Board on November 9th.

5. **OWASA has not scheduled the covering of all odor sources, but is working down a priority list of odor sources.**

**Response:** OWASA staff believes that the process for successful odor elimination should include evaluating the results of major odor improvements and periodically re-examining conditions and priorities for further improvements in addition to implementing those already scheduled.

OWASA has spent several million dollars on odor elimination work, is obligated to look at costs and benefits as part of wisely using customers’ funds, and the bottom line is to achieve odor elimination that neighbors will be satisfied with.

Since 2002, OWASA has addressed odor sources including:

a. the biosolids storage tanks (covered; foul air is treated in an odor scrubber)
b. the “flares” which burn unused methane (a video monitor and redundant equipment were added to keep the flame lit)
c. the solids digesters (new fixed covered structures were installed)
d. underground pipes that carried foul air away from the digesters (replaced with aboveground piping)

**ODOR MODELING**

6. **OWASA should use simple models to predict odor impacts on the surrounding neighborhoods, to evaluate the effectiveness of odor-related improvements at the WWTP and should use this data and obtain models to decide what additional work should be done for odor elimination.**
Response: Our consultants, Black & Veatch, will investigate the use of odor transport model(s) and data from the consultants’ study to determine the impact on surrounding neighborhoods and evaluate the effectiveness of planned improvements.

OTHER

7. OWASA stopped doing follow-up odor checks at the secondary perimeter outside of the WWTP as was prescribed in OWASA odor monitoring plan. OWASA should do what it said it would do. The neighbors should not have the job of monitoring for odor.

Response: In accord with the monitoring plan approved in October, 2005, we have resumed doing odor checks at the “secondary boundary” when odor is detected inside the WWTP at a level greater than “mild.”

8. Should neighbors continue to call to report odor via the WWTP Hotline? Should neighbors call to report odor even if it is expected?

Response: Neighbors are invited to call to report odor and are encouraged to do so if not sure whether a given odor release was expected. The number of odor reports from WWTP will not by itself be the basis for deciding whether successful odor elimination has been achieved or that the WWTP neighbors are satisfied.

9. OWASA should install an odor monitor in Highland Woods.

Response: We have done so at a residence offered by a Highland Woods homeowner.

CONCLUSION

OWASA staff will make a report to the OWASA Board on November 9th regarding the odor elimination program, the community meeting, the consultants’ draft odor report and recommended odor-related improvements.
MONTHLY SUMMARY OF CALLS AND E-MAILS TO OWASA FROM NEIGHBORS REPORTING ODOR IN THE MASON FARM WASTEWATER TREATMENT PLANT AREA

January, 2002 through October, 2006

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<td><strong>37</strong></td>
<td><strong>25</strong></td>
<td><strong>76</strong> (year to date)</td>
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LOG OF CALLS AND E-MAILS TO OWASA FROM NEIGHBORS REPORTING ODOR IN THE MASON FARM WASTEWATER TREATMENT PLANT (WWTP) AREA

September-October, 2006

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<td>10/27/2006</td>
<td>10:18 AM</td>
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LOG OF E-MAILS AND A LETTER FROM OWASA
TO NEIGHBORS OF THE MASON FARM WASTEWATER TREATMENT PLANT
IN ADVANCE OF EXPECTED ODOR RELEASES
AND REGARDING RELATED ITEMS

September- October, 2006

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<td>9:58 PM</td>
<td>E-mail notice that odor release on Sept. 6 was from wastewater entering headworks.</td>
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<td>Sept. 7</td>
<td>10:10 PM</td>
<td>E-mail notice that odor release on Sept. 7 was from wastewater entering headworks.</td>
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<td>Sept. 8</td>
<td>7:52 AM</td>
<td>Annual report to local governments with odor elimination program report to the Town of Chapel Hill; item on the Sept. 11 Town Council agenda</td>
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<td>Sept. 11</td>
<td>7:39 PM</td>
<td>E-mail notice of expected odor releases Sept. 12-14 and status report on work on gas handling pipes near solids digesters</td>
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<td>Sept. 13</td>
<td>2:05 PM</td>
<td>Invitations by e-mail and postcard to a Community Meeting on Sept. 27th sent to stakeholders including property owners within 4,000 feet of the WWTP</td>
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<td>12:34 PM</td>
<td>Information for Sept. 27th Community Meeting—paper and e-mail</td>
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<td>5:07 PM</td>
<td>E-mail to Sept. 27 Community Meeting participants with first draft meeting summary</td>
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<td>STREET OR OTHER LOCATION</td>
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<td></td>
<td>Frank P. Rexford</td>
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<td></td>
<td>Christina and Rex Page</td>
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<tr>
<td></td>
<td>Ed Ludwig</td>
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<tr>
<td></td>
<td>Joy Javits, President,</td>
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</tr>
<tr>
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<td>Highland Woods Association</td>
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<tr>
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<td>Fred Hall</td>
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<tr>
<td></td>
<td>Anna K Schwab</td>
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<td>Mary Helen and Donald Hayman</td>
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<td>Abraham and Elin Nussbaum</td>
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<td>Seth Kingsbury</td>
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<td>Amanda Kingsbury</td>
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<tr>
<td></td>
<td>Adam Kimplead</td>
<td>Brookberry Circle</td>
</tr>
<tr>
<td></td>
<td>Cindy Underwood</td>
<td>Summerwalk Circle</td>
</tr>
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<td>Dan Puckett</td>
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<tr>
<td></td>
<td>Donna Kaye</td>
<td>Finley Forest Drive</td>
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<td></td>
<td>Linda Vaughn, Unit Owner</td>
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</tr>
<tr>
<td></td>
<td>David J. Polewka</td>
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</tr>
<tr>
<td></td>
<td>Kathryn Conard</td>
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</tr>
<tr>
<td></td>
<td>Dan Choi</td>
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<tr>
<td></td>
<td>Julie Maness</td>
<td>Summerwalk Circle</td>
</tr>
<tr>
<td></td>
<td>Bob Stipe</td>
<td>Pine Lane</td>
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<tr>
<td></td>
<td>Phyllis Barrett</td>
<td>Laurel Hill Road</td>
</tr>
<tr>
<td></td>
<td>Bob Wendell, Pres. Laurel Hill Association</td>
<td>Country Club Road</td>
</tr>
<tr>
<td></td>
<td>Carol David</td>
<td>Laurel Hill Road</td>
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<tr>
<td></td>
<td>Pat Evans</td>
<td>Laurel Hill Road</td>
</tr>
<tr>
<td></td>
<td>Ewan Rodewald and Sharon Hodge</td>
<td>Pine Lane</td>
</tr>
</tbody>
</table>
ADDENDUM TO OWASA'S REPORT IN NOVEMBER, 2006
November 1, 2006
Page 12

St. Thomas More Church
and School
Carlos Lima
Ellen Johnson
Betsy Malpass
Hanson Malpass
Robert Ferrier
Laura King Moore
Jeanne Langley
John Pendergrass
AW Carr
Gary Glish
Shelly Day
Matt Haggood
St. Thomas More staff

Morgan Creek area
Iris Lane
Pine Lane
Fern Lane
Fern Lane
Fern Lane
Laurel Hill Road
Fern Lane
Laurel Hill Road
St. Thomas More

Ronald McDonald House
Family House
Reserve
Steve McPhail, President, Hunt's Reserve
Homeowners
Doug Longman
Susan Frye
Jeanne & David Jarrett
Nadine O'Malley
Mark Witcher
Ralph Abrahams
Kathy Abrahams
William Ware
Jim Ward--office
Jim Ward--home
Peter White
Johnny Randall
Kristin Sinclair

Bayberry Drive area
UNC
Carolyne Elfand, Assoc. Vice Chancellor
Ray DuBose, Energy Services Director
Margaret Holton, Water, Sewer & Stormwater Coord.
Peter Reinhardt, Environment, Health and Safety
Brent Webber, Environment, Health and Safety
Ross Fowler
Willie Seroggis
Michael Wilkinson, golf pro
John Inman, Men's Golf Coach
Sally Austin, Women's Golf Coach
Aaron Bednar

Siler's Fen Court
Flagstone Court
Rhododendron Drive
Siler's Fen Court
Siler's Fen Court
Chimineas Place
Chimineas Place
Bayberry Drive area
NC Botanical Garden
NC Botanical Garden
NC Botanical Garden
NC Botanical Garden
UNC at Chapel Hill
UNC at Chapel Hill
UNC at Chapel Hill
UNC at Chapel Hill
UNC at Chapel Hill
UNC Athletics
Finley Golf Course
Finley Golf Course
Finley Golf Course
Public Safety
UNC Tennis Center  
UNC parking  
Mike McFarland, Corporate Relations  
Scott Ragland, Corporate Relations  
Lisa Katz, Corporate Relations  
Linda Convisser, Corporate Relations  
Jon Howes, Corporate Relations  
Married Student Housing Manager  
UNC Farm (Faculty Staff Recreation Association)  
Steve Reznick, UNC Farm Assoc President  
Jim McAdams, Energy Services  
Jim Alty, Facility Services  
Steve Bryant, Facilities Management  
Cameron Smith, Construction Management  
Lynn Wooten, Corporate Relations  
Mel Hurston  
Karen McCall  
Chad Lefteris  

UNC Hospitals

Town of Chapel Hill

Roger Stancil, Town Manager  
Florentine A. Miller, Deputy Town Manager  
Bruce Heflin, Asst Town Manager  
Ralph Karpinos, Town Attorney  
Bill Letteri, Public Works Director  
Richard Terrell, Public Works Operations Supt.  
Greg Ling, Street Supv.  
Robert Sykes, Public Works  
Dan Jones, Fire Chief  
Robert Bosworth, Deputy Fire Chief  
Gregg Jarvies, Police Chief  
Jane Cousins, Police Planner  
Bob Overton, Police Captain  
Brian Curran, Police Major  
Richard Terrell, PW Operations Supt.  
George Small, Town Engineer  
Larry Tucker, Engineering  
Kurt Neufeng, Transit  
Bill Webster, Interim Parks and Recreation Director  
Ted Hobgood, Town Manager's Office  
Catherine Lazorko, Town Information Officer  
Lance Norris, Inspections Director  
Jennie Bob Culpepper, Planning Director  
Phil Mason, Planner  
Kumar Neppalli, Traffic Engineer  
Sabrina Oliver, Town Clerk  
Sandy Kline, Deputy Town Clerk  
Neil Pedersen, Superintendent  
Steve Scroggs  
Bill Mullin  

City Schools
Orange County
Jack Ball, Director
Orange 911 Center Supervisor on duty
Mike Tapp, Fire Marshall
Tom Konsler, Environmental Health

Other Utilities
Scott T. Gardner, Duke Energy
Steve Small, Duke Energy
Billy Miller, PSNC
David Bracey, Time Warner Cable
Troy Ellis, BellSouth

Other
Aldersgate Methodist Church c/o Deil Wright
Aurora Restaurant
Meadowmont Apts.
Dave Hill, Meadowmont Homeowners
WWTP Contractor (Mike Angelli, Pizzagalli Construction)
Pat Porter, Oaks Condominiums Owners Assoc
Chamber of Commerce
### SUMMARY OF ON-SITE AND OFF-SITE ODOR INSPECTIONS
AND NUMBER OF TIMES ODOR WAS DETECTED AT THE VARIOUS MONITORING SITES

#### ON-SITE:

<table>
<thead>
<tr>
<th>Month and year</th>
<th>Total Inspections</th>
<th>Entrance Gate (1)</th>
<th>Generator Bldg. (2)</th>
<th>Old Outfall (3)</th>
<th>UV Complex (4)</th>
<th>Solids Tanks (5)</th>
<th>Odor Scrubber (6)</th>
<th>Head-works (7)</th>
<th>Digesters (8)</th>
<th>Unc Bldg. (9)</th>
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<tbody>
<tr>
<td>Aug. 06</td>
<td>94</td>
<td>12</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>20</td>
<td>17</td>
<td>8</td>
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<tr>
<td>Sept. 06</td>
<td>87</td>
<td>15</td>
<td>10</td>
<td>1</td>
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<td>6</td>
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<td>23</td>
<td>3</td>
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<tr>
<td>Oct. 06</td>
<td>95</td>
<td>17</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>13</td>
<td>2</td>
<td>30</td>
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<td><strong>276</strong></td>
<td><strong>44</strong></td>
<td><strong>22</strong></td>
<td><strong>4</strong></td>
<td><strong>2</strong></td>
<td><strong>28</strong></td>
<td><strong>7</strong></td>
<td><strong>77</strong></td>
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<tr>
<td>%</td>
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<td>16%</td>
<td>8%</td>
<td>1%</td>
<td>1%</td>
<td>10%</td>
<td>3%</td>
<td>29%</td>
<td>22%</td>
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#### OFF-SITE:

<table>
<thead>
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<td>1</td>
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<tr>
<td>Sept. 06</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Oct. 06</td>
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<td>0</td>
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<td>0</td>
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<tr>
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<tr>
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<td>50%</td>
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</tbody>
</table>

**Notes:**

1) All except seven (7) odor events were characterized by the WWTP Operators as “Mild” with odors that would not be expected to create an off-site problem.

2) “Strong” odors were detected by the WWTP Operators on the following dates:
   - August 17 – 7:45 AM
   - September 4 – 1:00 AM
   - August 25 – 1:00 AM
   - September 8 – 7:55 AM
   - August 26 – 2:00 AM
   - October 25 – 1:00 AM *
   - August 28 – 1:00 AM

* An asterisk indicates a corresponding date when WWTP neighbor(s) reported odor at the same time.