

Minutes of Meeting #505, January 27, 2014 – Stony Brook Regional Sewerage Authority

LOCATION: Conference Room, River Road Plant, Princeton, NJ

MEMBERS PRESENT: Bartolini, Compton, Downey, Goldfarb, Morehouse

MEMBERS ABSENT: Patel

CONSULTANTS: Alexander

STAFF PRESENT: Bixby, Carlino, Cespedes, Coleman, Hess, Ireland, Irizarry, Kantorek, Kunert, Neuhof, Pchola, Rahimi, Redding

505.01 Pursuant to Section 13 of the Open Public Meetings Act, adequate notice of the time and place of this meeting was given by filing with the Authority's official newspapers, each Clerk of each municipality and by being posted on the Princeton Bulletin Board.

505.02 Approval of Minutes

The minutes from the December 16, 2013 meeting were approved as presented on a motion by Dr. Downey, seconded by Mr. Goldfarb and passed by a vote of 5 to 0.

505.03 Board Related Activities

Re-appointment of C. Schuyler Morehouse, Hopewell Borough

Mr. Morehouse, Hopewell Borough representative, was sworn in by Ms. Alexander. The Board congratulated Mr. Morehouse on his re-appointment to the Board.

Appointment of Nominating Committee

In preparation for February's reorganization meeting, Chairman Bartolini appointed the Personnel Committee as the Nominating Committee.

Consultant List

The consultant list was provided for information. Mr. Kantorek indicated that two contracts are being presented for award tonight. One to Chavond Barry Engineering to conduct a study for Incinerator Improvements and one to Kleinfelder/Omni for the Emergency Generator Final Design.

#### 505.04 Planning and Administration

Mr. Kantorek reported that the most current 12-month average daily River Road plant flow is 9,251,620 gpd with 900,214 gpd of approved but inoperative flow for a total committed flow of 10,151,834 gpd with 2,908,166 gpd or 22.27% of available capacity. The most current 12-month average daily flow at the Hopewell Plant is 226,053 gpd with 1,200 gpd of inoperative flow, for a total committed flow of 227,253 gpd with 24.25% or 72,747 gpd of available capacity. The Pennington Plant presently has 257,008 gpd as the most current 12-month average daily flow, with 16,719 gpd of approved but inoperative flow, for a total committed flow of 273,727 gpd, with 8.76% or 26,273 gpd of available capacity. Mr. Kantorek noted that the inoperative flow total for the Pennington Plant is the unused portion of Bristol-Meyers Squibb approved flow.

#### Monthly Flow Transmittal

The monthly flow transmittal for December was provided for information.

Mr. Kantorek reported that several adjustments were made for the month.

Staff conducted a meter verification on the Pennington STP Influent Meter on December 3<sup>rd</sup>. The meter was reading high by 0.03%. Staff also conducted a meter verification on December 19, 2013 and the meter was reading high by 2.30%. The meter data for the Pennington Influent meter was adjusted downward by 1.165% from the period of December 3<sup>rd</sup> through December 19<sup>th</sup> which is the average of the meter verification conducted on December 3<sup>rd</sup> and December 19<sup>th</sup>.

Due to continued issues with the meter, staff replaced the meter on December 27, 2013. The meter verification conducted on December 31<sup>st</sup> indicated that the meter was reading low by 1.33%. During the five-hour time period on December 27<sup>th</sup> when the influent meter was being replaced the hourly meter data for that time period was replaced with the effluent hourly meter data.

The Hopewell Borough flow is calculated by subtracting the Princeton Farms flow from the Hopewell STP flow. On December 7<sup>th</sup> and 8<sup>th</sup> the calculated Hopewell Borough flow was uncharacteristically low. There are several possible reasons for these results. It is possible that there was an issue with the Hopewell influent meter reading low on those two days, the Princeton Farms meter was reading high on those two days, or some of the metered flow from Princeton Farms was not reaching the Hopewell STP (the flow from Princeton Farms is pumped and then flows by gravity to the Hopewell STP).

The flow data for December 7<sup>th</sup> and 8<sup>th</sup> was replaced with the average flow data from December 6<sup>th</sup> and 9<sup>th</sup> for Hopewell STP Influent Meter.

Dr. Downey noted that a conference call was held with Hopewell Township regarding this issue. Staff indicated that there may be a leak in the air release valve at the top of Aunt Molly Road which may be causing the problem. Hopewell Township has engaged

Municipal Maintenance Services to replace that valve. The replacement of the valve has been delayed due to the recent inclement weather.

Mr. Kantorek indicated that on the table tonight is a corrected copy of the last page of the Flow Transmittal Report. Mr. Kantorek explained that dashes were placed in the row for the remaining eleven months of the current year, which caused the flow calculation to be based on twelve months rather than on one month.

Mr. Morehouse questioned the accuracy rate of parshall flumes. Mr. Kantorek responded that the accuracy rate is approximately  $\pm 5\%$ . Mr. Kantorek noted that the Authority makes adjustments to flows when the meter verifications/certifications are off by  $\pm 2\%$ . The meters are checked monthly by staff and audited quarterly by an outside vendor.

#### 505.05 Approval Requests and Actions

##### TWA-1 Approvals

##### **Facility Housing Wastewater Conveyance System, Blocks 1/1.01, Lots 10401, Godel Lane, Institute for Advance Study, Princeton**

Ms. Pchola reported that the original application for this project was presented at the October 28, 2013 Board meeting. The application was for the construction of a pump station, 679 linear feet of 8-inch sanitary sewer, 665 feet of 4-inch force main, three (3) three-bedroom single family homes and eight (8) three-bedroom townhome units for a total flow of 3,300 gpd

When discussed with Van Note Harvey, they had indicated that there would be a second phase to this project that will include four (4) three-bedroom single family units that will be constructed at a later date and was not included in the original application for flow. However the sewerage facilities are designed for the ultimate flow of 4,500 gpd.

As discussed with NJDEP the applicant now wants approval for the total flow of 4,500 gpd as addressed in a letter from Van Note-Harvey dated January 14, 2014. A copy of the letter was provided to the Board. In a letter from the Princeton Sewer Operating Committee (PSOC) dated January 7, 2014 to NJDEP, PSOC indicated that it has no objection to the addition of 1,200 gpd (for a total flow of 4,500 gpd). A copy of this letter was also provided to the Board.

Staff recommended approval of the requested additional 1,200 gpd of flow for a total application flow of 4,500 gpd.

Mr. Goldfarb moved for approval for the additional 1,200 gpd of flow bearing the same date as the original approval, October 28, 2013. Mr. Goldfarb explained that a new approval date would extend the two-year period when the applicant has to start construction on the project. Mr. Goldfarb indicated that the project may be experiencing difficulties.

A brief discussion followed. Chairman Bartolini asked Ms. Alexander, Counsel for the Authority, if this approval date can be modified to the original date. Ms. Alexander indicated that the Authority can approve the additional flow request with the original approval date of October 28, 2013.

The motion was seconded by Mr. Morehouse and passed by a vote of 5 to 0.

Time Extensions

None.

NJPDES Endorsements Requested

None.

Water Quality Management Plan Amendments

**Mercer County Wastewater Management Plan**

Ms. Pchola noted that staff provided a letter, dated December 17, 2013 indicating that SBRSA had no objection to the revision to the SBRSA sewer service to include Block 1901, Lot 11 (1036 Great Road, Princeton). A copy of the letter was provided to the Board.

**Middlesex County Wastewater Management Plan**

Ms. Pchola indicated that the Middlesex County Planning Department (MCPD) requested wastewater flows from 2012 and 2013 for the portion of South Brunswick and the portion of Plainsboro that flow to the SBRSA service area to use in the development of their current/committed wastewater flows for the Middlesex County Wastewater Management Plan (WMP). A letter from SBRSA to MCPD dated December 30, 2013 was provided with the requested information and explanation as to why the approved flows from the Mercer County WMP should be used. A copy of the letter was provided to the Board.

Mr. Kantorek noted that Middlesex County had requested actual flows for 2012 and 2013, which would be different than the flows in the Mercer County Wastewater Management Plan. Mr. Kantorek indicated that he had sent Middlesex County the flows they requested and the flows from the Mercer County Wastewater Management Plan. Mr. Kantorek explained that using actual flows during drought conditions will result in lower flow numbers. Both the Mercer County and Middlesex County Wastewater Management Plans should reflect the same flows for SBRSA's sewer service area.

## 505.06 Regulatory Report

### Discharge Monitoring Report (DMR)

Mr. Rahimi reported that the Discharge Monitoring Reports for the months of November and December were submitted to the NJDEP. No violations were reported for both months.

Mr. Rahimi indicated that the quarterly chronic bioassays were run in November for all three facilities and submitted to the NJDEP. The results were >100% for all the three facilities.

Mr. Rahimi reported that the River Road semi-annual Phosphorus Compliance Report was submitted to NJDEP. A copy of the report was provided to the Board.

Mr. Rahimi indicated that the annual beneficial reuse reports were submitted to NJDEP on January 13, 2014 for the River Road, Hopewell and Pennington facilities. No “beneficial reuse” of wastewater was used in 2013.

### Residuals Discharge Monitoring Report (RDMR)

Mr. Rahimi reported that the October and November 2013 Residuals Discharge Monitoring Reports were submitted to the NJDEP. All River Road parameters were compliant with the Authority’s Air Permit requirements.

Mr. Rahimi indicated that the semi-annual Residuals Discharge Monitoring Reports for Hopewell and Pennington were submitted to the NJDEP. The results are within the expected ranges for these facilities.

### Air Reporting

Mr. Rahimi reported that the Annual Belt Filter Press Report was submitted to NJDEP. This report calculates hourly and annual emissions rates for formaldehyde, benzene, vinyl chloride, chloroform, carbon tetrachloride, 1,1,1 trichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, toluene and xylenes. The calculated emissions were all less than the limits in the Authority’s Title V Permit.

Mr. Rahimi indicated that the 4<sup>th</sup> quarter 2013 Excess Emissions and Monitoring Report is currently being reviewed by staff. There were no excess emissions during this monitoring period.

Mr. Rahimi reported that the federal 40 CFR 60 Subpart O Semi-annual Reports for the incinerators are currently being reviewed by staff.

Mr. Rahimi indicated that staff is currently preparing the combined Semi-annual and Annual Title V Compliance reports.

Mr. Rahimi noted that the Authority signed a settlement agreement with NJDEP for the one-hour carbon monoxide violation. The one-hour average in excess of 100 ppm @7% O<sub>2</sub> was 101.6 ppm which occurred on July 27, 2013. The violation was due to operator error and therefore no affirmative defense was filed with the NJDEP. The penalty for the violation was \$400 however; NJDEP has provided SBRSA with a reduced penalty of \$200 (50% reduction). A copy of the settlement letter was provided to the Board.

Mr. Rahimi reported that in accordance with 40 CFR Part 63 Subpart JJJJJ: National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers Area Sources, staff submitted the notification reports on January 21, 2014 to the USEPA and a copy was sent to the NJDEP for the upstream plant heat boilers (boilers use No. 2 fuel oil). Our sources which are subject to a tune-up work practice or management practice standard must be completed no later than March 21, 2014.

### Laboratory

Mr. Rahimi reported that due to lack of a timely response from ALS Environmental (contracted laboratory) regarding the reporting and other issues, SBRSA has stopped sending samples to ALS Environmental. ALS Environmental has been verbally notified of the Authority's intention to cancel the contract. Samples have been sent to QC Labs as of January 1, 2014.

Mr. Rahimi indicated that during the evaluation process of choosing a contract laboratory based on the price and other factors, ALS Environmental, Suburban Testing Labs and QC Laboratories were ranked from one to three in that order. Staff has decided to continue utilizing QC Labs while evaluating Suburban Testing Labs by sending a few samples to them in the month of February in an attempt to evaluate Suburban Testing Labs. If it all works out well with Suburban Testing Labs, the Authority will offer them a contract.

Chairman Bartolini asked what is the Authority's legal obligation regarding this contract. Mr. Rahimi indicated that their contract contains a clause whereby the Authority can cancel a contract at any time without notice. Ms. Alexander indicated that if the contract contains that clause the Authority can cancel its contract with ALS Environmental. Chairman Bartolini asked Ms. Alexander to confirm that the contract contains that clause.

Chairman Bartolini asked staff if ALS Environmental has received any payments from the Authority. Mr. Rahimi indicated that the Authority has only paid for those tests that staff has received final reports.

Chairman Bartolini asked if the Authority's evaluation process needs to be revised. Dr. Downey indicated that ALS Environmental cannot meet the Authority's specifications. Mr. Rahimi indicated that as part of the next Request for Proposals (RFP), SBRSA will provide the labs with our samples to determine if the reports meet SBRSA's specifications.

Mr. Compton asked for an explanation of the >100% results for the chronic bioassay. Mr. Rahimi explained that the test is conducted using different portions of the Authority's

effluent to grow daphnia. The results indicated that there was no mortality rate. SBRSA's permit limits for chronic bioassay is 40% and the >100% results are good.

### Safety

Mr. Irizarry reported that there were no loss time accidents/injuries for this reporting period. The Authority has gone two consecutive calendar years without a "Loss Time Accident". A graph depicting loss time accidents from 2006-2013 was provided to the Board. Staff noted that because there were no loss time accidents in the past year, the Authority will be receiving awards from the Joint Insurance Fund as well as from the Governor's Occupational Safety and Health Awards Program.

Mr. Irizarry indicated that as of January 2, 2014 the Authority has gone **848** consecutive days without a "Loss Time Accident".

Mr. Irizarry reported that on January 19, 2014 an incident occurred in the sump pit of the polymer area in the Operations Building Basement that resulted in the building filling with smoke. A summary of the incident and photographs were provided to the Board.

Mr. Irizarry explained that on November 19, 2013 the Princeton Fire Department conducted an inspection of the River Road Facility and the Princeton Pump Station. The violation on the notice of order to correct, that was issued, was abated and was verified by the Fire Inspector on December 18, 2013.

Mr. Irizarry indicated that on December 4, 2013 the Hopewell Fire Department conducted an inspection of the Hopewell and Pennington Facilities. All violations on the notice of order to correct, that was issued, were abated and verified by the Fire Inspector on December 18, 2013.

Mr. Irizarry indicated that training for this reporting period included:

- Shop and Tool Safety training was provided by the Joint Insurance Fund (JIF) on December 11, 2013 for fourteen (14) employees.
- Confined Space Awareness training was provided in-house on December 11, 2013 for two (2) employees.
- Emergency Escape Pack use training was provided in-house on January 21, 2014 for (14) employees.

Mr. Irizarry reported that the escape packs have been placed on each hearth level of the incinerator area. This provides an additional safety measure if the incinerator malfunctions and the bypass damper does open immediately thus filling the area with smoke.

A copy of a spreadsheet summarizing the training that was conducted for staff in 2013 was provided to the Board.

Mr. Kantorek indicated that a meeting took place on January 27, 2014 with the Princeton Fire Inspector (formerly the Princeton Borough Fire Inspector). The Inspector indicated that the Authority's fire protection system is inadequate. Mr. Kantorek explained that the fire protection system was installed not long ago and the system the Authority chose was based on the advice of the then Princeton Township Fire Inspector. According to the Princeton Fire Inspector, all the alarms at the River Road Wastewater Treatment Plant must go directly to the fire department. An official letter from the Princeton Fire Inspector is forthcoming. Staff will review the State regulations to verify that this needs to be done.

#### 505.07 Litigation

The Litigation Report was provided for information.

#### River Road, Hopewell and Pennington Wastewater Concerns

Ms. Alexander indicated that a meeting between SBRSA representatives and the NJDEP was held on January 16, 2014, wherein the outstanding permit issues were discussed for all three plants and a plan for resolution of the outstanding issues was proposed.

Mr. Kantorek reported that the NJDEP is preparing to make the phosphorus TMDLs public. NJDEP met with SBRSA (and NJDEP will meet with other Authorities) to present the TMDLs and to see how SBRSA and the other Authorities would react to the limits. Mr. Kantorek indicated that the phosphorous limits are better than staff expected. Pennington has a year round phosphorus limit of 0.43. Hopewell has a seasonal limit; 0.52 for summer and a limit of 1.28 for the winter. Staff expects that SBRSA should not have an issue meeting these limits after new chemical addition facilities are completed.

NJDEP also discussed the outstanding issues from 2004 with the Pennington and Hopewell Permits. SBRSA is still litigating the 2004 permits. NJDEP issued draft permits in 2011 and SBRSA had issues with those draft permits. The issues included copper, nitrates, arsenic and TDS. NJDEP indicated that there would most likely not be limits for Nitrates at the upstream plants. If new draft permits were issued that contained Nitrate limits NJDEP indicated that those limits would be stayed. NJDEP indicated that they would use a surrogate for TDS so that limit would not be in the new permits. Arsenic will remain in the permit; NJDEP indicated that the EPA requires that limit. SBRSA would litigate that limit but that would delay the Pennington Wastewater Treatment Plant expansion. It appears that NJDEP wants to remove the older permits from their active status therefore, showing only issues with the 2011 draft permits.

Chairman Bartolini asked if that was advantageous for the Authority. Ms. Alexander indicated that it is always good to clear up issues with the permits. When you adjudicate a permit it is only those issues that the Authority commented on. Ms. Alexander explained that the Authority should definitely litigate the Nitrate limits because if it goes to rule and

the limits are not stayed, then SBRSA would not have another opportunity to adjudicate that limit.

Mr. Kantorek noted that copper was also an issue, however the Authority has conducted studies for copper at the upstream plants and it shows that the Authority would not have to treat for copper. Nitrates and Arsenic will be the only issues left.

#### New Source Performance Standards for Sludge Incinerators (SSI) Rule Proposal

Mr. Kantorek indicated that the National Association of Clean Water Agencies (NACWA) sent a letter to USEPA requesting a meeting to discuss the next steps regarding the establishment of air emission standards for SSIs based on the U.S. Court of Appeals remanding significant portions of the Agency's March 11, 2011 SSI emission standards due to technical shortcomings with the rules but did not vacate the standards.

NACWA is concerned that public wastewater utilities are working to meet the potentially flawed emission standard by the original March 2016 deadline and may be wasting precious limited resources to meet standards that could change.

NACWA offered its help to expedite this matter.

#### 505.08 Operations Report

Mr. Kunert reported that after the RTO ceramic media blocks were replaced SBRSA switched back to the RTO. The RTO is functioning well with a much lower pressure differential.

Mr. Kunert indicated that there is no rag build-up in the Modified Aeration Effluent Channel. This is the channel that was dredged two months ago. This is an indication that the new Bar Screens are functioning very well.

Mr. Kunert reported that Nitrification Clarifier #4 was off line for approximately three (3) weeks due to an issue with the underground wiring that powers the drive unit. It was found that two of the three wires were going to ground. Fortunately, there were spare wires pulled during the installation of this clarifier which were used to rectify the problem.

Mr. Kunert indicated that staff is currently evaluating the new grit removal system on a daily basis. The new system is not removing nearly as much grit as anticipated. Staff had a representative from the manufacturer on site for a portion of three consecutive days along with Kleinfelder/Omni making adjustments to the system and evaluating the results. The investigation will continue until staff is satisfied that the system is functioning as expected.

## Odor Report

Staff received two Odor Complaints from our surrounding area during the month of December. No odor complaints were received for the partial month of January.

Mr. Kantorek indicated that staff will review the logs for each of these odor complaints to determine what the conditions were at the time the complaints were received. Mr. Kantorek indicated that Mr. Donato Nieman, Montgomery Township Administrator, was contacted to inquire if Montgomery Township has received any odor complaints from Montgomery Woods. Mr. Nieman indicated that the Township has not received any odor complaints from that area. The Board asked staff to have a discussion with the one Montgomery Woods resident that called in six (6) odor complaints in 2013.

## Customer Septage and Sludge Deliveries

The quantity of liquid sludge and sludge cake exceeded their budgeted amounts while the quantity of gray water was below its budgeted amounts for the month of December.

## Maintenance Report

Mr. Ireland reported that on December 11, 2013 the Flowminutor at the Millstone Pump Station was placed back in service after being rebuilt in house. All of the Flowminutor components were thoroughly inspected, and all the knives and cutters were replaced.

Mr. Ireland indicated that on December 12, 2013 it was discovered that a section of the top reinforcement bar inside the cake storage bin had deteriorated and broke away from the bin wall. It became lodged between one of the Live Bottom Feed Screws and the bin wall. The storage bin was emptied and the section of the cross bar was removed. The remaining sections of the damaged cross bars were cut away from the storage bin walls and removed. The middle and lower cross members were inspected and appear to be in good condition. The drive gears for the Live Bottom Feed Screws were replaced and the storage bin was placed back in service.

Mr. Ireland reported that on December 31, 2013 the skimmer on Thickener #1 hung up on the scum beach causing the shear pin to break. A slight modification was made to the skimmer and the unit was placed back in service.

Mr. Ireland indicated that on January 13, 2014 Nit Clarifier #4 was returned to service. The drive unit kept tripping out due to faulty control wires from the MCC panel to the drive unit. A set of spare wires were discovered during trouble shooting of the unit and were used in place of the faulty wires. The unit is now operational and ready for service.

The number of open work requests stand at eight (8). The Preventive Maintenance graphs show that SBRSA is currently averaging eight (8) days overdue and the number of overdue units is approximately seventy (70). This was due to reduced staffing, a snow storm with

sub-zero temperatures, MA rag removal project, and repairs to two major pieces of equipment.

## 505.09 Construction Report

### Incinerator Improvements

Ms. Pchola reported that staff met with CBE on December 19, 2013 to further discuss their proposal for the incinerator improvements. Based on our discussions, Chavond Barry Engineering (CBE) has provided a proposal dated December 30, 2013 to conduct the study for the incinerator improvements to meet existing air emission limits and the new sewage sludge incinerator (SSI) air emission limits requirements for a lump sum fee of \$88,000. The proposal includes the evaluation of several alternatives for the upgrade or the replacement of the existing scrubber system to meet the existing Title V particulate and sulfur dioxide limits and the limits of the new SSI rule, which go into effect March 2016.

CBE will also provide a cost estimate of the existing incinerators with all modifications that have been made since inception to determine “how close” the Authority is to being subjected to the air emission limits associated with new incinerators (based on the specified improvements which cannot exceed 50% of today’s cost of the existing incinerators).

Dr. Downey indicated that this was discussed at great length in the Construction Committee meeting. A new scrubber could cost as much as \$2 million dollars and the Authority has two incinerators. CBE will provide SBRSA with options for improving the incinerator. Dr. Downey noted that a revised copy of Resolution 2014-01 was on the table. In the next to the last paragraph the sentence that reads “...in its current budget.” should read “...in its current capital budget.”

Dr. Downey moved for approval of Resolution 2014-01, as amended, Authorizing the Award of a “No Political Contributions Allowed” contract to Chavond-Barry Engineering in the amount of \$88,000 to conduct the Study for Incinerator Improvements. The motion was seconded by Mr. Compton and passed by a roll call vote of 5 to 0. Resolution 2014-01 follows.

### **Resolution Authorizing the Award of a “No Political Contributions Allowed” Contract to Chavond-Barry Engineering Corp. for Incinerator Improvements Study**

**WHEREAS**, the Stony Brook Regional Sewerage Authority (“Authority”) has a need to make improvements to our Incinerators/Air Pollution Control train to meet the existing air emission limits and the new air emission limits imposed by EPA’s new regulations (40 CFR60 Subpart MMMM) for existing sewage sludge incinerators (SSI); and

**WHEREAS**, the new SSI regulations are in effect and proof of compliance is required by March 21, 2016; and

**WHEREAS**, a study is required to evaluate alternatives for improvements to meet the existing and new air emission limits; and

**WHEREAS**, the Authority also has the need to qualify the incinerators as modified or existing based on improvements made to the incinerators since inception to ensure that we are regulated under Subpart MMMM and not regulated under the regulations as a new incinerator; and

**WHEREAS**, the qualified purchasing agent, Stuart Neuhof has determined and certified in writing that the value of the work will exceed \$17,500; and

**WHEREAS**, Chavond-Barry Engineering Corp. (CBE) has submitted a proposal dated December 30, 2013 indicating they will perform the study for the lump sum fee of \$88,000 for the tasks outlined in the proposal; and

**WHEREAS**, CBE. has a Business Entity Disclosure Certification on file with the Authority which certifies that CBE its subsidiaries, assigns or principals controlling in excess of 10% of the company has neither made a contribution that is reportable pursuant to the Election Law Enforcement Commission pursuant to N.J.S.A. 19:44A-8 or 19:44A-16, in the one (1) year period preceding the award of the contract that would, pursuant to P.L. 2004, c.19, affect its eligibility to perform this contract, nor will it make a reportable contribution during the term of the contract to a municipal political party committee of a governing body that appoints members to the Authority including, Princeton, South Brunswick Township, West Windsor Township, Hopewell Borough, Hopewell Township, and Pennington Borough, when the contract is awarded, or to any municipal candidate committee of any candidate for or holder of municipal elective public office of any such municipality when the contract is awarded, and

**WHEREAS**, the Stony Brook Regional Sewerage Authority has Funds available in its current capital budget.

**NOW THEREFORE, BE IT RESOLVED** that the Board of the Stony Brook Regional Sewerage Authority authorizes the Secretary to enter into a contract with CBE as described herein; and

**BE IT FURTHER RESOLVED** that the Business Disclosure Entity Certification and the Determination of Value is on file.

<u>Recorded Vote:</u>	<u>AYE</u>	<u>NO</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
Robert A. Bartolini	X			
Harry Compton	X			
Gale D. Downey	X			
David A. Goldfarb	X			
C. Schuyler Morehouse	X			
Bharat Patel				X

### Incinerator Compliance Testing

Ms. Pchola indicated that staff met with KEMS to discuss the SO<sub>2</sub> and particulate (subpart O) compliance with the existing emission limits. Based on the information to date with the sulfur analysis conducted on the sludge fed to the incinerators staff has scheduled the compliance testing for particulates (OS1) and SO<sub>2</sub> (OS27) the week of February 24, 2014.

Dr. Downey noted that the sulfur content varies significantly with temperature and flow quantity. When the stack test was performed during the summer months, SO<sub>2</sub> was at approximately one and half times higher than it is currently.

### Pump Station Comminutor Project

Ms. Pchola indicated that Kleinfelder continues with the work on the comminutor design project.

### Facilities Emergency Generator Project

Ms. Pchola reported that AECOM and Kleinfelder/Omni conducted a site visit on January 9, 2014 to look at the interior layout of the Chemical Building and roof to determine the space available for the new generator and roof top equipment. This was discussed at length in the Construction Committee meeting.

Ms. Pchola explained that Kleinfelder/Omni provided staff with the draft preliminary design report (PDR) on January 20, 2014. Staff reviewed the report and provided our comments. A copy of the draft Preliminary Design Report was provided to the Board. The preliminary construction cost estimate for a new natural gas emergency generator for the River Road WWTP is \$4,430,000, \$920,000 for a smaller more efficient diesel generator at the Millstone Pumping Station and \$880,000 for a smaller more efficient diesel generator at the South Brunswick Pumping Station for a total estimated construction cost of \$6,230,000.

Ms. Pchola indicated that at the request of staff, Kleinfelder/Omni has provided a proposal for the final design for the Emergency Generator Project. A copy of the proposal was provided to the Board. As indicated in the proposal the cost for the final design of a new natural gas emergency at the River Road WWTP and a smaller new diesel emergency generator at Millstone Pumping Station is \$329,670. The cost to include a new more efficient diesel emergency generator at South Brunswick in the final design would be an additional \$38,800 for a total design cost of \$368,470.

As previously indicated the contract documents and loan application for the Environmental Infrastructure Trust must be submitted by March 3, 2014. In addition, the application for the NJ Hazard Mitigation Grant Program is due on March 3, 2014. Staff will be attending a meeting on February 5<sup>th</sup> to discuss the loan application process.

Dr. Downey indicated that this was discussed at tonight's Construction Committee at length. It is the recommendation of the Construction Committee to include all three facilities in the emergency generator design. Therefore, the cost for the SBRSA Facilities Emergency Generator Final Design would be \$368,470.

Dr. Downey moved for approval of Resolution 2014-02. Mr. Goldfarb indicated that this Resolution should reflect the design with the radiator on the roof.

Dr. Downey then moved for the approval of Resolution 2014-02, as amended, seconded by Mr. Compton and passed by a roll call vote of 4 to 0. Mr. Morehouse abstained. Resolution 2014-02 follows.

**Resolution Authorizing the Award of a “No Political Contributions Allowed” Contract to Kleinfelder/Omni for the Emergency Generator Design for River Road Wastewater Treatment Plant, Millstone Pumping Station and South Brunswick Pumping Station**

**Resolution No. 2014-02**

**WHEREAS**, the Stony Brook Regional Sewerage Authority (SBRSA) has a need for resiliency/reliability for our Emergency Backup power for the Authority's facilities; and,

**WHEREAS**, Kleinfelder/Omni has conducted an Emergency Generator Study “Study” dated December 2013; and

**WHEREAS**, the Study has outlined several alternatives for resiliency/reliability for backup power for the SBRSA facilities with the addition of backup power for our sludge handling facilities at the River Road WWTP; and

**WHEREAS**, Kleinfelder/Omni has prepared a Draft Preliminary Design Report for the Emergency Generator Project dated January 23, 2014 that will be the basis for final design; and

**WHEREAS**, the SBRSA has submitted a “Letter of Intent” to the New Jersey Environmental Infrastructure Financing Program (NJEIFP) for resiliency improvements (backup power) for the SBRSA facilities for the State FY 2015 funding cycle; and

**WHEREAS**, the preliminary design documents and loan application must be submitted on March 2, 2014; and

**WHEREAS**, the qualified purchasing agent, Stuart Neuhof has determined and certified in writing that the value of the work will exceed \$17,500; and

**WHEREAS**, Kleinfelder/Omni has submitted a proposal dated January 23, 2014 indicating they will complete the Final Design of the emergency generators based on the draft Preliminary Design Report dated January 23, 2014 for a total cost of \$368,470 for the

tasks outlined in the proposal which includes a new natural gas emergency generator at the River Road Wastewater Treatment Plant and associated substation modifications, a new diesel emergency generator at the Millstone Pumping Station; and a new diesel emergency generator at the South Brunswick Pumping Station; and

**WHEREAS**, the Preliminary Design Report recommended the alternative to install the radiator associated with the proposed natural gas emergency generator on the roof of the Chemical Building and Option C “modifying the automatic transfer switch and add auto-transfer control to the main breaker”; and

**WHEREAS**, Kleinfelder/Omni has a Business Entity Disclosure Certification on file with the Authority which certifies that Kleinfelder/Omni its subsidiaries, assigns or principals controlling in excess of 10% of the company has neither made a contribution that is reportable pursuant to the Election Law Enforcement Commission pursuant to N.J.S.A. 19:44A-8 or 19:44A-16, in the one (1) year period preceding the award of the contract that would, pursuant to P.L. 2004, c.19, affect its eligibility to perform this contract, nor will it make a reportable contribution during the term of the contract to a municipal political party committee of a governing body that appoints members to the Authority including, Princeton, South Brunswick Township, West Windsor Township, Hopewell Borough, Hopewell Township, and Pennington Borough, when the contract is awarded, or to any municipal candidate committee of any candidate for or holder of municipal elective public office of any such municipality when the contract is awarded, and

**WHEREAS**, the Stony Brook Regional Sewerage Authority has Funds available in its current capital budget.

**NOW THEREFORE, BE IT RESOLVED** that the Board of the Stony Brook Regional Sewerage Authority authorizes the Secretary to enter into a contract with Kleinfelder/Omni as described herein; and,

**BE IT FURTHER RESOLVED** that the Business Disclosure Entity Certification and the Determination of Value is on file.

Recorded Vote:

	<u>AYE</u>	<u>NO</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
Robert A. Bartolini	X			
Harry Compton	X			
Gale D. Downey	X			
David A. Goldfarb	X			
C. Schuyler Morehouse			X	
Bharat Patel				X

### RTO Inspection/Media Replacement

Ms. Pchola reported Dürr and their sub-contractor completed the replacement of the RTO media on December 18, 2013. The RTO was restarted and placed into service on December 19, 2013. The pressure drop across the media bed prior to the media change out ranged from between eleven (11) and thirteen (13) inches w.c. Since the change out, the pressure drop is between four (4) to six (6) inches w.c., a 58% decrease or similar to the initial pressure drop when the unit was first put into operation in 2009.

The annual on-line inspection of the unit originally scheduled for December 19, 2013 has been rescheduled for February 5, 2014.

### Contract 10-1, Headworks Project

Ms. Pchola reported that as of Pay Estimate No. 34 this project is 96% complete. During the month of December 2013, Tomar completed the installation of the third biofilter, completed the installation of the supply air FRP ductwork and in-line duct heaters for the Screenings Room and Dumpster Room, completed painting the interior walls of the Screenings Room and various aboveground site piping, repaired/replaced perimeter fence removed during construction, formed and placed concrete for roadway curbs, and completed the installation of the biofilter leachate drain line.

After two months of operation, the grit removal system has not achieved an acceptable level of performance. Two discrete problems have been identified; 1) grit production from the grit removal tanks has been minimal and sporadic and, 2) the grit washer does not move the grit out of the washer and onto the downstream screw conveyor. The grit removal system (GRS) manufacturer, Walker Process was contacted and arrangements were made for a representative to come to the site and troubleshoot the system. Prior to the representative's arrival, SBRSA Operations and Engineering staff made various adjustments to the system in an effort to improve the GRS efficacy, but these efforts were met with limited success. The Authority withheld \$50,000 from Tomar until this problem is resolved.

Beginning on January 21, 2014 the manufacturer's representative along with SBRSA staff (R. Kunert) and M. Bean of KLF/Omni operated the GRS in various modes over a two day period and observed the results. Based on the results of the testing the following was confirmed:

- The key variable to achieving good grit settling and removal is controlling the volume of air being introduced into the grit removal tank. The correct setting of this variable is highly dependent on site specific conditions (presently there is too much air being introduced into the tank).
- The speed of the grit transport screw within the grit washer is too fast preventing grit from being moved along the screw and onto the screw conveyor downstream of the washer.
- An adequate level of grit must be maintained within the grit washer hopper. This variable is tied directly to the grit removal tanks ability to produce grit.

Over the next few weeks, testing will continue to determine the best air setting for the grit removal and alternatives for controlling the speed of the grit washer screw. Variable Frequency Drives (VFD) may be required to be installed at the compressors and the grit washer screws.

Contract 13-2 RRWWTP (Sodium Hypochlorite) Chemical Storage Tank Replacement Project

Ms. Pchola reported that as of Pay Estimate No. 1 this project is 68% complete. The new storage tanks were delivered to the River Road WWTP site on December 30, 2013. Installation of the new tanks began on January 23, 2014 and will take approximately 2½ weeks to complete.

Contract 13-3 Pennington WWTP Return Sludge Pump Replacement Project

Ms. Pchola reported that as of Pay Estimate No. 2 this project is 36% complete. The contractor has formed and poured the new pump pad, set the new pump into place and completed the piping work. The electrician has completed the installation of the conduit, wire, and the new VFD. It is anticipated that the new pump will be started-up and placed into service by the end of January.

Contract 13-4, Belt Filter Press Platform Project

Ms. Pchola reported that as of Pay Estimate No. 2 this project is 22% complete. The contractor has completed the demolition of the scum piping and has submitted the shop drawings for the new platforms. Staff is waiting for the resubmittal of the platform shop drawing.

Contract 13-5, Nitrification Settling Tank No. 3 Drive Replacement

Ms. Pchola reported that the tank drive shop drawing submittal was received, reviewed, and returned to the contractor with comments. The drive is expected to be delivered in approximate 12 weeks.

Contract 14-1 Incinerator Bypass Stack Damper Replacement

Ms. Pchola reported that there have been several occasions where the incinerator emergency bypass stack dampers had difficulty opening automatically and required physical force to open. The bypass damper must reliably open when we lose power and/or when we have incinerator equipment failure. The existing dampers are not reliable and as a result the stack dampers require replacement. CBE provided staff with preliminary specifications for the replacement of the butterfly type damper with a stack cap type damper. The new damper type remains closed with air pressure and opens by gravity. Staff is in the process of reviewing the specifications. It is anticipated that this project will be advertised in February with bids received in March. It is expected that the construction cost will be approximately

\$200,000 both stacks (a more definitive estimate will be provided once the design is complete). The project also includes a new compressor dedicated to the bypass dampers and associated air piping.

Contract 14-2 River Road STP Scum Mixer Replacement

Ms. Pchola indicated that staff has prepared the contract documents for the replacement of the scum mixer located at Scum Pumping Station No. 2 (next to the sludge thickeners). The project was advertised for bid on January 15, 2014. A site visit was held on January 28, 2014. Bids will be received on February 18, 2014. The estimated construction cost for this project is \$90,000.

505.10 Finance Report

Payment of Bills and Claims

Mr. Morehouse moved the approval of Resolution 2014-03, for the payment of bills and claims in the amount of \$1,542,171.76 with two signatures instead of three, seconded by Dr. Downey and passed by a roll call vote of 5 to 0. Resolution 2014-03 follows.

**Resolution Regarding Payment of Bills and Claims**

**Resolution No. 2014-03**

**WHEREAS**, the Stony Brook Regional Sewerage Authority received certain claims against it by way of voucher, and

**WHEREAS**, the staff and Authority members have reviewed said claims,

**NOW, THEREFORE, BE IT RESOLVED** by Stony Brook Regional Sewerage Authority that these claims in the total amount of \$1,542,171.76 be approved for payment with checks bearing two authorized signatures instead of three authorized signatures.

Recorded Vote:

	<u>AYE</u>	<u>NO</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
Robert A. Bartolini	X			
Harry Compton	X			
Gale D. Downey	X			
David A. Goldfarb	X			
C. Schuyler Morehouse	X			
Bharat Patel				X

### Treasurer's Report

Mr. Neuhof reported that net income for the first month of FY 2014 is \$425. The Authority has total cash and investments of \$18,462,937 at an average interest rate of 0.18%. The current construction projects balance is \$13,121,322. Mr. Neuhof noted there are sufficient funds for these projects. The outstanding bond principal totals \$23,188,346. Mr. Neuhof noted that a principal payment of \$590,000 was paid on December 1, 2013. The New Jersey Cash Management Fund yield is 0.06%.

Dr. Bartolini noted that administrative expenses, professional fees and O&M were all over budget. Mr. Neuhof indicated that this is typical for the beginning of the year. Many service contracts and dues are paid at the beginning of the fiscal year. Mr. Neuhof explained that O&M is over budget due to the RTO ceramic tile replacement project. The Authority used almost double the amount of gas in December because the RTO was not in operation. Mr. Neuhof indicated that the additional revenue that the Authority has received from Bayshore largely offsets these expenses.

Mr. Goldfarb pointed out that the contract for design work on the incinerator awarded earlier this evening will significantly narrow the profit on the sludge business; though not to the point where the Authority needs to examine whether or not the Authority should continue with this business. But a few more significant projects are going to eliminate profits. Chairman Bartolini indicated that what was approved is the study and the Board will examine each item and decide which projects will go forward and which projects will be looked at again at a later date. Mr. Goldfarb indicated that before any work is approved for the incinerators it should be looked at closely by the Board. Chairman Bartolini indicated that the Board always looks at projects on the incinerators very closely.

### Monthly Sludge Business Analysis

Mr. Neuhof reported that net income for the month of December is \$116,363. Gas usage for the month of December was 128,519 therms. The high use of natural gas was due to the RTO ceramic tile replacement during which the afterburners were in use. The remaining simple payback for the RTO is 2.6 years.

### Natural Gas Purchases

Mr. Neuhof provided the Board with a spreadsheet of all the gas purchases from December 2005 through July 2017. The Authority is currently paying for natural gas at a rate of \$4.91 per decatherm which is an 11% decrease from the prior year. Next fiscal year the Authority will see a 17.5% decrease; in 2016 there will be a small increase of 2.1% and then a 1.5% increase for the eight months ending July 31, 2007.

Mr. Goldfarb asked what the price of gas is currently. Mr. Kantorek indicated that it was around \$4 per decatherm.

Mr. Morehouse indicated that it was a proactive management decision to install the RTO which has decreased the use of natural gas by approximately 50%. Had the Authority not installed the RTO it could have jeopardized the outside sludge business based on the high natural gas quantity.

#### 505.11 Personnel Report

The Personnel Report was provided for member information.

Mr. Kantorek indicated that the Authority has forty-four (44) filled positions with two vacancies. However, the Authority has advertised for an Operator VI which is an entry level position and is in the process of receiving resumes.

#### 505.12 Correspondence

For information

#### 505.13 Old Business

None.

#### 505.14 New Business

##### **Award of Contract**

##### **-Resolution 2014-04, Award of Contract for the Supply of a Liquid Odor Control Chemical**

Mr. Kunert reported that on January 15, 2013 sealed bids for the supply of a liquid odor control product were received. These bids were based on the results of trials that were conducted prior to bidding. During these trials, each bidder had to meet the qualifications regarding product effectiveness and determine the necessary dosage to meet these qualifications. Two companies performed trials and qualified, however, only one bid was received. The other company, Water Engineering Services Inc., did not bid because they could not get their bid bond in time.

Mr. Goldfarb asked if the Authority was obligated to purchase a minimum amount of odor control product. Mr. Kunert responded no.

It was noted that the average total pounds used during the trials are used in the formula to calculate a total bid price. This explains why a vendor may have a higher unit price but a lower one year and two year total price.

The last contract was a two year contract with Water Engineering Services, Inc. at a unit price of \$0.879/lb for a total two year contract amount of \$167,629.86.

Mr. Kunert recommended approval of Resolution 2014-04, awarding a two year contract to the sole responsive bidder, Siemens Water Technologies in the amount of \$184,748.40. So moved by Dr. Downey, seconded by Mr. Goldfarb and passed by a roll call vote of 5 to 0. Resolution 2014-04 follows.

**Resolution Awarding Contract for the  
Supply of a Liquid Odor Control Chemical**

**Resolution No. 2014-04**

**WHEREAS**, the Authority advertised for the receipt of sealed competitive bids in accordance with the requirements of the Local Public Contracts Law, N.J.S.A. 40A:11-1 et seq. for the supply of a Liquid Odor Control Chemical; and

**WHEREAS**, the following sealed bid was received by the Authority on January 15, 2014, as more fully set forth as follows:

	<u><b>12-Month</b></u>	<u><b>24-Month</b></u>
Siemens Water Technologies	\$0.74/lb. / \$92,374.20	\$0.74/lb. / \$92,374.20
		\$0.74/lb. / \$92,374.20
		<b>2Yr. Total = \$184,748.40</b>

**WHEREAS**, the Authority has determined that the sole bid of Siemens Water Technologies is the lowest 24-month bid; and

**WHEREAS**, the bidder, Siemens Water Technologies submitted a bid of \$0.74 per pound for the first year and \$0.74 per pound for the second year for a total two year price of \$184,748.40; and

**WHEREAS**, the bid has been reviewed by the Authority to determine compliance with the bid specifications in accordance with the Local Public Contracts Law N.J.S.A. 40A:11-1 et seq. and has been determined to be in order; and

**WHEREAS**, there are sufficient funds to provide funding for the contract amount.

**NOW, THEREFORE, BE IT RESOLVED** by the Stony Brook Regional Sewerage Authority that it hereby awards a 24-month contract to Siemens Water Technologies, the lowest responsive bidder for the supply of a Liquid Odor Control Chemical in the estimated amount of \$184,748.40.; and

**BE IT FURTHER RESOLVED** that the Executive Director, staff and consultants are authorized to take all appropriate measures to ensure that all appropriate documents are provided by the Contractor.

<u>Recorded Vote:</u>	<u>AYE</u>	<u>NO</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
Robert A. Bartolini	X			
Harry Compton	X			
Gale D. Downey	X			
David A. Goldfarb	X			
C. Schuyler Morehouse	X			
Bharat Patel				X

Award of Sludge Cake Contracts

The following sludge cake contracts were approved on a motion by Dr. Downey, seconded by Mr. Compton and passed by a vote of 5 to 0.

Town of Clinton	January 1, 2014 to December 31, 2014
Two Rivers Water Reclamation Authority	March 1, 2014 to February 28, 2017

Mr. Kantorek indicated that Two Rivers Water Reclamation Authority had requested a three-year extension on their contract. Chairman Bartolini indicated that approval of Two Rivers Water Reclamation be approved.

505.15 Open to the Public

None.

505.16 And such other issues as may come before the Board

None.

505.17 Adjournment

As there was no further business to come before the Board, the meeting was adjourned at 9:03 p.m. on a motion by Dr. Downey, seconded by Mr. Morehouse and passed by unanimous vote.

Respectfully Submitted,

John Kantorek  
Secretary

Written by  
Patricia Carlino  
February 3, 2014