

DELAWARE RIVER BASIN COMMISSION

MEETING OF MARCH 3, 2010

Minutes

The Commission met at the office of the Delaware River Basin Commission in West Trenton, New Jersey.

Commissioners present: Katherine E. Bunting-Howarth, Vice Chair, Delaware
Colonel Peter A. DeLuca, Second Vice Chair, United States
Susan K. Weaver, Pennsylvania
Fred Sickels, New Jersey
The State of New York was not represented due to state employee travel restrictions.

DRBC Staff participants: Carol R. Collier, Executive Director
Robert Tudor, Deputy Executive Director
Kenneth J. Warren, DRBC General Counsel, Hangley Aronchick Segal & Pudlin
Pamela M. Bush, Commission Secretary & Assistant General Counsel
Richard C. Gore, Chief Administrative Officer
William J. Muszynski, Water Resources Management Branch Manager
Kenneth F. Najjar, Planning & Information Technology Branch Manager
Chad Pindar, Supervisor, Project Review Section
Amy Shallcross, Supervisor, Operations Section

Acting Chairwoman Dr. Howarth convened the business meeting at 1:30 p.m.

Minutes. Dr. Howarth requested a motion for approval of the Minutes of the Commission's meeting of December 9, 2009. Mr. Sickels so moved, Ms. Weaver seconded his motion, and the Minutes of the Commission's December 9, 2009 meeting were approved by unanimous vote.

Announcements. Ms. Bush announced the following meetings and events:

- *DRBC Water Management Advisory Committee Meeting.* Tuesday, April 20, 2010 at 10:00 a.m. and Tuesday, July 27, 2010 at 10:00 a.m., both in the Goddard Conference Room, DRBC, 25 State Police Drive, West Trenton, NJ. The staff contact is Victoria Lawson at (609) 883-9500, extension 308.
- *DRBC Flood Advisory Committee Meeting.* Wednesday, May 26, 2010 at 10:00 a.m. in the Goddard Conference Room, DRBC, 25 State Police Drive, West Trenton, NJ. The staff contact is Laura Tessieri at (609) 883-9500, extension 304.

Hydrologic Conditions. Amy Shallcross offered the following report on hydrologic conditions in the Basin:

The observed precipitation for the Delaware River Basin above Montague, New Jersey for the period January 1 through February 28, 2010 was 5.71 inches or 0.04 inches above normal. The observed precipitation for the Basin above Trenton, New Jersey for the same period was 6.34 inches or 0.23 inches above normal and for Wilmington, Delaware for this period, 8.39 inches or 2.15 inches above normal.

The average observed streamflow of the Delaware River at Montague, New Jersey in January 2010 was 8,305 cubic feet per second (cfs) or 167 percent of the long-term average for the month. For the same period, the average observed streamflow of the Delaware River at Trenton, New Jersey was 17,564 cfs, or 137 percent of the long-term average for the month.

For the month of February 2010, the average observed streamflow at Montague was 4,950 cfs, or 87 percent of the long-term average for the month. The average streamflow at Trenton during the same period was 11,076 cfs, or 80 percent of the long-term average for the month.

In the Lower Basin, as of March 2, 2010, Beltzville Reservoir contained 12.98 billion gallons (bg) usable, or 99.8 percent of usable storage, and Blue Marsh contained 4.72 bg usable, or 99.2 percent of winter pool usable storage. As of February 22, Merrill Creek contained 14.997 bg usable, or 95.6 percent of usable storage.

In the Upper Basin, as of March 2, 2010, Pepacton Reservoir contained 123.118 bg usable, or 87.8 percent of usable storage. Cannonsville contained 81.394 bg usable, or 85.0 percent of usable storage. Neversink contained 28.390 bg usable, or 81.3 percent of usable storage. The total New York City Delaware Basin reservoir storage was 232.902 bg usable, or 86.0 percent of usable storage.

During the month of January 2010, the location of the seven-day average of the 250-parts per million (ppm) isochlor, also known as the "salt line," ranged from River Mile (RM) 68 to RM 72. The normal location of the salt line during January is RM 68, a location which is ten miles downstream of the Delaware-Pennsylvania state line. As of February 28, the salt line was located at RM 74, which is six miles upstream of the normal location for February.

Ms. Elaine Reichart of Aquatic Conservation Unlimited asked whether the reservoir releases made in accordance with the FFMP were based on useable storage or actual storage in the reservoirs. Ms. Shallcross responded that the releases are based upon useable storage. Ms. Reichart asked whether it would be possible for Ms. Shallcross to state the percentages of *actual* storage in her written report for purposes of flood mitigation for benefit of the people who live below the reservoirs. Ms. Shallcross said this could be done. Ms. Reichart asked why the lower basin should in her view be penalized by New York City's unwillingness to remove silt from the bottom of the reservoirs. Ms. Reichart said that in her opinion, releases from the City's reservoirs should be based upon actual storage because the fact that a portion of the storage is not useable is not the fault of those living downstream. Ms. Shallcross explained that useable storage is defined by the elevation of the lowest intake for the release works and that any storage

below the lowest intake could not be released. Ms. Reichart countered that if the silt weren't there and pumps were employed, the "unusable storage" could be used. Ms. Shallcross said this was a different question.

Dr. Howarth suggested that this conversation be continued after the meeting. Ms. Reichart said she was willing to meet with staff at a later time, as she had about ten more questions. Dr. Howarth asked Ms. Reichart to state her questions during the Public Dialog portion of the meeting in order to ensure they would get answered. Ms. Reichart agreed.

Executive Director's Report. Ms. Collier's remarks are summarized below:

- *Funding Appropriations.* Staff submitted four requests to the Basin's congressmen and senators. One is for the federal government's signatory contribution in support of DRBC's FY 2011 operating budget. Ms. Collier noted that with the exception of federal fiscal year 2009, the federal share of the agency's operating expenses, equal to twenty percent of budgeted member contributions, has not been appropriated since 1997. Ms. Collier said that this request was made jointly by DRBC and the river basin commissions of the Potomac and Susquehanna rivers, which are the only three commissions for which the federal government's annual financial contribution is a statutory obligation. The second request is for a fourth year of support, through NOAA (within the Department of Commerce), for development of the Basin flood warning system. Ms. Collier explained that flood warning improvements proposed for FY2011 would address storm surges in the tidal portion of the Basin. Past improvements have focused on non-tidal reaches. DRBC's third request is for funding to assess the cumulative impacts of natural gas extraction on water resources of the Basin. Congressmen Maurice Hinchey of New York and Joe Sestak of Pennsylvania both have expressed strong support for such an effort. The fourth request is for funds to develop a strategy for reducing impacts of climate change on the Basin. Such a strategy would include the development of models to test freshwater flow needs for the estuary in the event of rising temperatures, and storage needs in the event of less frequent but larger storms, longer droughts, flood risks, etc.

Ms. Collier noted as a point of good news that the President's budget for FY 2011 includes a line item for the U.S. Geological Survey's program called "WaterSMART". The purpose of this program, which was formerly called the "Water Census" is to develop a national census for water comparable to the national census for population. The project will include water budgets by watershed and will identify sub-watersheds that are more sensitive than others. Three watersheds – the Delaware Basin among them -- are delineated for special studies. The other two are the Colorado and the Apalachicola-Chattahoochee-Flint Basin (the "ACF") in Georgia, Alabama and Florida. If the budget is approved the USGS will receive \$500 million for each of three years, of which \$1.5 million will be used to answer water supply questions in the Delaware Basin. That funding might also help answer some of the Basin's climate-related questions.

- *Legislative Caucus.* The Delaware River Basin has a congressional caucus with four co-chairs – Maurice Hinchey of New York, Rush Holt of New Jersey, Mike Castle of Delaware and Charlie Dent of Pennsylvania. These members have put forward new legislation called

the Delaware River Basin Conservation Act of 2010, the purpose of which is to develop a non-regulatory framework for coordinating conservation efforts and increasing resources for on-the-ground restoration projects. The Act would provide federal support for development of a strategy and specific projects for protection and restoration within the watershed. The Secretary of Interior would be directed to establish the Delaware River Basin Restoration Program within the U.S. Fish & Wildlife Service and to work in conjunction with existing organizations and management structures to identify, prioritize and implement restoration and protection actions in the Basin. There would also be a well-funded, competitive grant program to support locally-driven projects. The federal share for each of these projects would be as much as 75 percent. A proposed \$5 million would be authorized annually.

- *Summer Internship.* DRBC has an opportunity for summer internships. Although in light of current budget constraints we will not be able to fund as many interns as we have in the past, DRBC hopes to employ some interns to help with sampling tasks.

General Counsel's Report. Mr. Warren reported that in the *M&M Stone Company* case DRBC filed its brief in the Court of Appeals for the Third Circuit. Mr. Warren said he had distributed the document electronically to the Commissioners, and anybody in the audience who wanted copies could obtain them electronically from the Court's website. Mr. Warren said it was likely that oral argument would be scheduled for sometime in May. He noted that DRBC remains optimistic, given that the case against DRBC and the other defendants was dismissed by the District Court, that the Third Circuit will affirm the lower court's ruling.

Mr. Warren mentioned another case in which the DRBC is not a party but which is pending against New York City in the federal district court in Manhattan. DRBC was served with a subpoena for documents in the case, which involves releases from the Neversink Reservoir. After some negotiation, a response to the subpoena was worked out, and DRBC will be producing documents.

Public Hearing: Project Review Applications. Although included in the notice of public hearing for this date, hearings on the following three projects were postponed to allow additional time for review: Cabot Corporation, D-1970-072-4; Lynn Township, D-1977-041 CP-2; and Deb-El Food Products, D-2009-036-1.

Project Review Section Supervisor Chad Pindar presented the remaining 27 projects for the Commission's consideration in three categories: Category A, consisting of docket renewals involving no substantial changes (hearing items 1, 3, 4, 5, 6 and 7); Category B, consisting of renewals involving significant changes, such as an increase or decrease in an authorized withdrawal or discharge (hearing items 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21); and Category C, consisting of projects not previously reviewed by the Commission (items 22, 23, 24, 25, 27, 28, 29 and 30).

A. *Renewals with No Substantive Changes (hearing items 1, 3, 4, 5, 6 and 7).* No comments were submitted to the Commission on these projects.

1. Gulph Mills Country Club, D-1966-217-2. An application for the renewal of a ground and surface water withdrawal project to continue withdrawal of 11.886 million gallons per thirty days (mg/30 days) to supply the applicant's golf course irrigation from two pond intakes and existing Well No. 1, completed in the Conestoga Formation. The project is located in the Matsunk Creek Watershed in Upper Merion Township, Montgomery County, Pennsylvania, within the Southeastern Pennsylvania Ground Water Protected Area.
3. Palmerton Borough, D-1981-024 CP-8. An application for the renewal of a groundwater withdrawal project to continue to withdraw a maximum of 25 mg/30 days to supply the applicant's public water supply system from existing Wells Nos. 4, 6, 7, A and the Foundry Well, all completed in the Bloomsburg Formation Aquifer. The applicant also requests that an existing surface water withdrawal approved by Docket No. D-90-17 be included in the docket renewal. The existing surface water withdrawal allocation provides for a maximum of 71 mg/30 days to supply the applicant's industrial water supply demand. The surface water withdrawal is made through two intakes located on the Aquashicola and Pohopoco Creeks, respectively. Wells Nos. 4, 6, 7 and A are located in the Aquashicola Watershed. The Foundry Well alone is located in the Lehigh River Watershed. The wells and intakes are located in Palmerton Borough, Carbon County, Pennsylvania. The site is located within the drainage area of the section of the non-tidal Delaware River known as the Lower Delaware, which is classified as Special Protection Waters.
4. Antietam Valley Municipal Authority, D-1987-045 CP-3. An application for approval of the renewal of the Antietam Valley Wastewater Treatment Plant (WWTP). The WWTP will continue to discharge an average annual flow of 1.225 mgd of treated sewage effluent to Antietam Creek, a tributary of the Schuylkill River. The WWTP has a hydraulic design capacity of 2.45 mgd (maximum monthly flow) and is located in St. Lawrence Borough, Berks County, Pennsylvania.
5. Joint Municipal Authority of Wyomissing Valley, D-1991-009 CP-3. An application for renewal of the Joint Municipal Authority of Wyomissing Valley WWTP. The existing WWTP will continue to discharge 4.0 mgd of treated effluent to the Wyomissing Creek, a tributary of the Schuylkill River. The facility is located in the City of Reading, Berks County, Pennsylvania.
6. Aqua Pennsylvania – Honesdale System, D-1995-057 CP-2. An application for renewal of a groundwater withdrawal project with an expired DRBC docket, to continue a withdrawal of 46.20 mg/30 days of groundwater to supply the applicant's public water supply system from existing Wells Nos. Horseshoe 1 and 2, Weidner 3, Goyette 4, Perano 5, and Quarry 6, all completed in the Catskill Geologic Formation. Ownership of the project was recently transferred. The project is located in the West Branch Lackawaxen River Watershed in the Borough of Honesdale and Texas Township, Wayne County, Pennsylvania. The site is located within the drainage area of the section of the

non-tidal Delaware River known as the Upper Delaware, which is classified as Special Protection Waters.

7. Borough of Strausstown, D-2005-006 CP-2. A renewal application for approval to continue discharging 0.065 mgd of treated effluent from the Borough of Strausstown WWTP. The WWTP is located at River Mile 92.47 – 76.8 – 15.4 – 0.8 – 6.5 – 0.4 (Delaware River – Schuylkill River – Tulpehocken Creek – Northkill Creek – Little Northkill Creek – Jackson Creek) in Pocono Township, Monroe County, Pennsylvania.

Mr. Pindar recommended that the Commissioners approve hearing items 1, 3, 4, 5, 6 and 7. Hearing no questions or comments from the Commissioners or the public, Dr. Howarth requested a motion to approve the six docket renewals with no substantive changes. Mr. Sickels so moved, Colonel DeLuca seconded his motion, and hearing items 1, 3, 4, 5, 6 and 7 were approved by unanimous vote.

B. Renewals with Substantive Changes (hearing items 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21).

8. NuStar Asphalt Refining, LLC, D-2009-037-1. An application for approval of an existing 5.48 mgd discharge of untreated industrial wastewater and stormwater through discharge Outfalls Nos. DSN002A, DSN003A, DSN004A, DSN005A, DSN006A, and DSN007A. Stormwater is commingled with condensate from steam heating, sand filter backflush water, and/or tank drain discharges. The asphalt refinery is located in Paulsboro Borough, Gloucester County, New Jersey, and the six outfalls are located in Water Quality Zone 4 at or near River Mile 89.66 (Delaware River).
9. Borough of Brookhaven, D-1966-096 CP-3. An application for approval of the upgrade of the existing Brookhaven Borough WWTP. The existing trickling filter treatment system is proposed to be replaced with an extended aeration system incorporating the Modified Ludzak-Ettinger (MLE) process. Notice of the project was previously published in the Commission's January 12, 2010 Notice of Applications Received (NAR) as Docket D-1998-032 CP-2. This second notice is being provided to reflect the change to DRBC's assigned docket number. The project WWTP will continue to treat an average annual flow of 0.192 mgd and discharge to the Chester Creek. The facility is located in the Borough of Brookhaven, Delaware County, Pennsylvania.
11. Borough of Ambler, D-1985-026 CP-5. An application for approval of a groundwater withdrawal project to continue a withdrawal of up to 90 mg/30 days to supply the applicant's Public Water Supply system from 10 existing wells and a spring – Whitemarsh Spring. The Whitemarsh Spring withdrawal is not included in the version of the docket approved in September of 2008. The project wells are drilled in the Lower Member of the Stockton Formation, and Whitemarsh Spring is located in the Ledger Dolomite. The spring outlet and the project wells are located in the Wissahickon Creek Watershed in Lower Gwynedd and Upper Dublin townships, Montgomery County, Pennsylvania within the Southeastern Pennsylvania Ground Water Protected Area.

12. East Vincent Township Municipal Authority, D-1993-032 CP-2. An application for approval to renew a discharge of up to 2.0 mgd from the existing Veterans Center WWTP. The WWTP will continue to discharge an average of 0.5 mgd of treated domestic wastewater to the Schuylkill River via Outfall No. 001 at River Mile 92.47 – 43.5 (Delaware River – Schuylkill River). In addition, modifications to the existing WWTP are proposed, to include a new screen facility, a new filter building, repairs to existing treatment tanks, and other miscellaneous improvements. The Veterans Center is located in East Vincent Township, Chester County, Pennsylvania.
13. Valley Forge Sewer Authority, D-1995-006 CP-2. An application for approval of the modification of the Valley Forge Sewer Authority WWTP. The docket holder proposes to replace the current disinfection system (chlorine contact tank) with an ultraviolet light (UV) disinfection system. The modification also includes the re-rate of the WWTP from 8.99 mgd to 9.2 mgd. Although the plant re-rate was completed in 1999, it occurred without the Commission's review. The WWTP will continue to discharge to the Schuylkill River. The facility is located in Schuylkill Township, Chester County, Pennsylvania.
14. Lehigh County Authority, D-2001-020 CP-5. An application for approval of an interconnection between the Lehigh County Authority's (LCA's) Central Lehigh Division (CLD) service area and Allentown's Schantz Spring source. Included in LCA's application was a request for emergency approval of a temporary interconnection and the immediate ability for LCA to use up to 1.0 mgd. Two subsequent phases of construction to permanently interconnect LCA's and Allentown's systems – an "Interim" Phase for 2 mgd and a "Long-Term" Phase for an average of 7 mgd – make up the remainder of the applicant's request. The LCA's groundwater withdrawal project will continue to supply up to 256.24 mg/30 days of water to the applicant's public water supply system. No increase in the existing groundwater allocation is requested. The project is located in the Beekmantown Formation in the Cedar Creek Watershed in Upper Macungie Township, Lehigh County, Pennsylvania, within the drainage area of the section of the non-tidal Delaware River known as the Lower Delaware, which is classified as Special Protection Waters.
15. Muhlenburg Township Authority, D-2001-030 CP-2. An application for approval of a ground water withdrawal project to supply a peak monthly withdrawal of up to 153.09 mg/30 days and a total yearly withdrawal of 730 mg of water to the applicant's public water supply system from new Wells Nos. PH-1 and PH-2 and to increase the existing total withdrawal from all wells from 168.50 mg/30 days to 228.50 mg/30 days. The increased allocation is requested in order to meet projected increases in service area demand. The project wells are completed in the Allentown Formation in the Laurel Run Watershed in Muhlenburg Township, Berks County, Pennsylvania. The site is located within the drainage area of the Schuylkill River.
16. Village of Delhi, D-2001-033 CP-2. An application for approval of a re-rate of an existing 0.815 mgd WWTP to 1.015 mgd. The project WWTP is located at River Mile 330.70 – 57.4 (Delaware River – West Branch Delaware River), approximately 22 miles upstream of the Cannonsville Reservoir, within the drainage area of the section of the non-tidal Delaware

River known as the Upper Delaware, which is classified as Special Protection Waters. The facility is located in the Town of Delhi, Delaware County, New York.

17. Nazareth Borough Municipal Authority, D-2002-038 CP-2. An application for approval of the modification of the existing Nazareth Borough Municipal Authority WWTP. The existing 1.6 mgd WWTP includes two (2) Intermittent Cycle Extended Aeration System (ICEAS) basins. The applicant proposes to modify the WWTP by adding two (2) new additional ICEAS basins. The WWTP will continue to discharge to Shoeneck Creek, a tributary of the Bushkill Creek. The project is located within the drainage area of the section of the non-tidal Delaware River known as the Lower Delaware, which is classified as Special Protection Waters, in Lower Nazareth Township, Northampton County, Pennsylvania.
18. Tidewater Utilities, Inc., D-2005-027 CP-2. An application for the renewal of an existing groundwater withdrawal project and to increase the current withdrawal from 3.51 mg/30 days to 4.967 mg/30 days to supply the applicant's public water supply system from existing Wells Nos. VWQ-1, VWQ-2, WQ-2, and WQ-4, completed in the Piney Point and Frederica aquifers. Wells Nos. WQ-2 and WQ-4 were included in previously approved Docket No. D-2005-027 CP-1. Wells Nos. VWQ-01 and VWQ-02 are existing wells that were not included in Docket No. D-2005-027 CP-1. The increased allocation is requested in order to meet projected increases in service area demand. The project is located in the Isaac Branch Watershed of the Saint Jones River in the City of Dover, West Township, Kent County, Delaware.
19. Ingersoll-Rand Company, D-2006-014-2. An application for renewal of a 0.09 mgd discharge from the applicant's groundwater remediation plant and reconfiguration of a related outfall. The WWTP will discharge to Lopatcong Creek, an FW2-NT (C2) stream, which is a tributary of the Delaware River that converges with the Delaware at River Mile 182.0 – 1.87 (Delaware River – Lopatcong Creek). The WWTP is located in the Town of Phillipsburg, Warren County, New Jersey, within the drainage area of the section of the non-tidal Delaware River known as the Lower Delaware, which is classified as Special Protection Waters.
20. Beaver Lake Estates, D-2009-038 CP-1. An application for approval of the expansion of the Beaver Lake Estates Wastewater Treatment Plant (WWTP) from 0.035 mgd to 0.14 mgd. Outfall No. 001 will continue to discharge to an unnamed tributary of Barnum Brook, a tributary of the Neversink River at River Mile 253.64 – 25.15 – 2.0 – 1.12 (Delaware River – Neversink River – Barnum Brook – Unnamed Tributary) in the drainage area of the section of the non-tidal Delaware River known as the Middle Delaware, which is classified as Special Protection Waters. The Beaver Lake Estates WWTP is located in the Town of Thompson, Sullivan County, New York.
21. Bucks County Water and Sewer Authority, D-1999-013 CP-2. An application for approval of the expansion of the Bucks County Water and Sewer Authority (BCWSA) Harvey Avenue WWTP. The existing 0.9 mgd WWTP currently utilizes an extended aeration activated sludge process in the form of a carousel oxidation ditch. The existing treatment train will remain in place, and a second 0.7 mgd treatment train will be

constructed, consisting of a vertical loop reactor, clarifiers, and an aerobic digester. The proposed addition will increase the hydraulic design capacity of the WWTP to 1.6 mgd. The facility will continue to discharge to Cook's Run, a tributary of the Neshaminy Creek. The facility is located in the Borough of Doylestown, Bucks County, Pennsylvania.

The Commission received no substantive comments on these proposed renewal projects with substantive changes, and Mr. Pindar recommended that the Commissioners approve hearing items 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21. Hearing no other questions or comments, Dr. Howarth requested a motion for approval of the group of 13 dockets. Ms. Weaver so moved, Mr. Sickels seconded her motion, and hearing items 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21 were approved by unanimous vote.

C. New Projects (hearing items 22, 23, 24, 25, 27, 28, 29 and 30). These eight projects comprised new discharges or withdrawals or constituted projects new to the Commission.

22. Maxatawny Township Municipal Authority, D-2007-001 CP-1. An application for approval to construct a new Maxatawny Township Municipal Authority WWTP with a discharge of 0.14 mgd. The WWTP is proposed to discharge to Saucony Creek, which is a tributary of Maiden Creek. The facility will be located in Maxatawny Township, Berks County, Pennsylvania.
23. Wyeth Pharmaceuticals, D-2009-015-1. An application for approval of an existing 0.068 mgd discharge of contact cooling water (CCW). CCW will continue to be discharged from the applicant's pharmaceutical facility via Outfalls Nos. 001 and 002. The project outfalls are located at River Mile 92.47 – 32.36 – 4.68 (Delaware River – Schuylkill River – Perkiomen Creek). At this location, the Perkiomen Creek is classified by PADEP as a warm water/ migratory fishery (WWF/MF). The facility is located in Upper Providence Township, Montgomery County, Pennsylvania.
24. Geerling's Florist, Inc., D-2009-031-1. An application for approval of a groundwater withdrawal project to continue to supply up to 4.4 mg/30 days of irrigation water to the applicant's greenhouse and nursery operations from existing Wells Nos. 1, 2, 3, 4, 5, and 6. The project is located in the Brunswick Formation in the Mill Creek and Pidcock Creek watershed in Buckingham Township, Bucks County, Pennsylvania within the Southeastern Pennsylvania Ground Water Protected Area.
25. Chester Valley Golf Club, D-2009-035-1. An application for approval of a groundwater and surface water withdrawal project to supply up to 5.6 mg/30 days of water from existing sources to irrigate the applicant's golf course. Sources include a storage pond, Well No. 11904, and one gravity-fed surface water intake. The well is located in the Elbrook Formation within the Valley Creek Sub-basin. The surface water will be withdrawn from an unnamed tributary of Valley Creek. The project is located in East Whiteland Township, Chester County, Pennsylvania within the Southeastern Pennsylvania Ground Water Protected Area.

27. Tuscan/Lehigh Dairies, Inc., D-2009-043-1. A new groundwater withdrawal project to supply up to 8.7 mg/30 days of water to the applicant's industrial cooling and process system from existing Wells Nos. 3, 4, and 5. The project wells are located in the Brunswick Group in the Towamencin Creek Watershed in Upper Gwynedd Township, Montgomery County, Pennsylvania, within the Southeastern Pennsylvania Ground Water Protected Area.
28. Bucks County Water and Sewer Authority, D-2009-047 CP-1. An application to construct a 2 million gallon underground storage tank in the Bensalem Collection System, which is a tributary of the Poquessing Interceptor. The storage tank is proposed to help alleviate wet weather overflows from the Poquessing Interceptor near Holy Family University in the City of Philadelphia during heavy rain events. The Poquessing Interceptor is interconnected with the Delaware Interceptor, which is the pipeline that conveys untreated sanitary waste and stormwater to the Philadelphia Water Department's Northeast Wastewater Treatment Plant. The Bensalem Collection System will continue to transfer untreated sanitary waste and stormwater from Bensalem Township, Bucks County, Pennsylvania to the Poquessing Interceptor, which connects with the Delaware Interceptor in the City of Philadelphia, Pennsylvania.
29. Sullivan Farms, IV, LLC (Kaufman Farms), D-2009-048 CP-1. An application to approve the construction of the new 17,282 gpd Kaufman Farms WWTP. The WWTP will discharge to four on-site infiltration beds. The project is located near River Mile 253.64 – 9.5 – 11.5 (Delaware River – Neversink River – Basher Kill) in the drainage area of the section of the non-tidal Delaware River known as the Middle Delaware, which is classified as Special Protection Waters. The project is located in the Village of Wurtsboro, Sullivan County, New York.
30. Delaware County Solid Waste Authority, D-1989-018 CP-5. The Delaware County Solid Waste Authority (DCSWA) applied to the Commission on October 9, 2008 (Application No. D-1989-018 CP-4) to expand the Rolling Hills leachate treatment plant (LTP) from 0.08 mgd to 0.115 mgd. Proposed modifications included a clarifier, new ozone system, additional blowers, new pumps, new boilers, and the utilization of existing storage tanks to ensure that the treatment process complies with permit limitations such as color, ammonia, and TDS. The Commission approved that application in December of 2009. DCSWA later filed a revised application – D-1989-018 CP-5 – proposing to include a PACT/SBR system and increasing the proposed discharge from 0.115 mgd to 0.12 mgd. The LTP treats leachate from the Rolling Hills Landfill and discharges to the Manatawny Creek at Rile Mile 92.47 – 54.15 – 12.2 (Delaware River – Schuylkill River – Manatawny Creek) through a diffused outfall. The project LTP is located in Earl Township, Berks County, Pennsylvania.

DRBC received no substantive comments on hearing items 22, 23, 24, 25, 27, 28, 29 and 30. Accordingly, Mr. Pindar recommended that the Commissioners approve the dockets as proposed for the entire group of eight new projects.

As to hearing item number 23 – Wyeth Pharmaceuticals, D-2009-015-1 – Colonel DeLuca asked whether the proposed discharge was from an open loop cooling system. Mr. Pindar replied that the discharge flows into a pond and the pond discharges to a creek. Colonel DeLuca noted that because the proposal involved a surface water draw-up from a cooling system, there would be no mixing of the water with wastewater from the industrial process and thus no residue of pharmaceuticals in the discharge. As to hearing item 29 – Sullivan Farms, IV, LLC, D-2009-048 CP-1 – involving a discharge to onsite infiltration beds, Colonel DeLuca asked what the required emergency management plan would address. Mr. Pindar noted that pumps would be needed to operate the plant if it were not gravity fed; and in that event, an emergency plan would be required to address the possibility of a power failure affecting the pumps.

Colonel DeLuca also asked whether non-potable water, including re-used water if available, was required to be considered as an alternative to fresh surface or groundwater for purposes of golf course irrigation. Mr. Pindar said that the staff certainly encourages the use of re-used water, but the Commission's rules and regulations currently do not require it. Mr. Pindar noted that within the Southeastern Pennsylvania Ground Water Protected Area, if a subbasin is over a certain limit, gray water is an option for projects seeking additional water.

Hearing no further comments or questions, Dr. Howarth requested a motion for approval of hearing items 22, 23, 24, 25, 27, 28, 29 and 30. Colonel DeLuca so moved, Ms. Weaver seconded his motion and the eight dockets were approved by unanimous vote.

Resolution to Approve the FY 2010-2015 Water Resources Program. Consideration of this resolution was postponed to allow additional time for review.

Public Hearing: Resolution Authorizing the Executive Director to Select a New Auditor. Mr. Gore noted that the Compact provides that the Commission's financial statements must be subject on an annual basis to an independent audit. Management has established as a practice that the contract with any auditing firm should not exceed five years. The firm that produced the audited financial statements for 2009 did so in the fifth year of its engagement. Staff issued an RFP for accounting and auditing services for FY 2010, with a bidding period that closed on Friday, February 26. Seven responses to the RFP were received. The proposed resolution provides the Executive Director with the authority to award a contract for auditing services to the lowest responsible bidder for a period of three years with an option for an additional two, provided that the term of the contract may not exceed a total of five years. Dr. Howarth asked whether the Commission had used the same auditor for the last past five years. Mr. Gore replied that it had.

Mr. Sickels asked whether any or all of the RFPs had come in within the expected price range. Mr. Gore replied that staff had not yet opened the bidding envelopes, since the responses had been delivered on Friday and an evaluation of the submissions had not yet been completed. He noted that the services for the previous year had cost \$18,000. He said that he expected the new bids to be in that range if not a few dollars higher.

Hearing no further comments or questions, Dr. Howarth requested a motion to approve the resolution authorizing the Executive Director to select a new auditor. Mr. Sickels so moved,

Colonel DeLuca seconded his motion and the Resolution for the Minutes was unanimously approved.

The complete text of the resolution follows:

RESOLUTION FOR THE MINUTES

A RESOLUTION authorizing the Executive Director to retain an accounting firm.

WHEREAS, Section 14.11 of the *Delaware River Basin Compact* requires an annual independent audit; and

WHEREAS, the Commission has issued a Request for Proposal dated January 15, 2010, soliciting the professional services of Certified Public Accountants to perform the annual audits for fiscal year 2010 through fiscal year 2012 with an option for two additional years; now therefore,

BE IT RESOLVED that the Executive Director is authorized to award a professional services contract to the lowest responsible bidder.

This Resolution shall take effect immediately.

Resolution Authorizing the Executive Director in Connection with Repair of the HVAC System, to Contract for a Study of Options for Expanding Capacity of the Goddard Room. Mr. Gore explained that this resolution for the minutes would authorize the purchase of architectural services in the amount of approximately \$3,400 to design potential modifications to the Goddard Conference Room in connection with replacement of failing components of the building's heating, ventilating and air conditioning (HVAC) system. The HVAC components date from construction of the building in the early 1970s. Phase 1 of the HVAC improvements includes the Goddard Room. In addition to poor temperature control and ventilation, problems with the room include its size, which is too small to accommodate the number of people who wish to attend meetings of the Commission, and a noisy air handling system that interferes with the ability of meeting-goers to hear speakers. The project engineer indicated that to reduce noise, replacement of the air handling unit should be accompanied by new duct work. Because the ceiling must be opened up to replace the existing duct work, it would be most efficient to make any additional physical changes to the room at the same time. Mr. Gore noted that it might be possible to fit as many as 30 more seats in the room if it were expanded into the large foyer space. Even if, due to current budgetary constraints, changes to the space were postponed to some time in the future, the duct work and air handling system would need to be designed and sized in such a way as to accommodate the intended changes.

In response to a question from Colonel DeLuca, Ms. Collier explained that due to the age of the Compact, which dates from 1961, contracts for the purchase of services valued at more than \$2,500 must be advertised and let upon sealed bids to the lowest responsible bidder, except when, as in the instant case, the services to be provided are of a specialized or professional nature. When the bidding requirements do not apply as in this case, the Commission's practice

has been to formally authorize the Executive Director to contract for professional services when the amount to be expended exceeds \$2,500. DRBC selected the architect, Alfred R. Trevino, because he has performed well for the agency in the past, including in a project involving modifications of the lobby area. As a result of Mr. Trevino's past work, he is familiar with the building.

Hearing no further comments or questions, Dr. Howarth requested a motion to approve the resolution for the minutes authorizing the Executive Director, in connection with repair of the HVAC system, to contract for a study of options for expanding the capacity of the Goddard Room. Colonel DeLuca so moved, Ms. Weaver seconded his motion and the Resolution for the Minutes was adopted by unanimous vote.

The complete text of the resolution follows:

RESOLUTION FOR THE MINUTES

A RESOLUTION authorizing the Executive Director to purchase a study of potential modifications to the Commission's Goddard Conference Room in connection with the repair/replacement of failing heating, ventilating and air-conditioning (HVAC) components.

WHEREAS, the Commission has received the recommendation from Snyder, Hoffman Associates Inc., Mechanical Electrical Consulting Engineers that Phase 1 of the repair and replacement of components of the Commission's failing 1970's era HVAC system should be directed to the Goddard conference room; and

WHEREAS, these HVAC system improvements will require the redesign and reinstallation of existing duct work; and

WHEREAS, expansion of the seating capacity of the Goddard conference room is badly needed to accommodate more of those who wish to attend public meetings of the DRBC; and

WHEREAS, if expansion of the seating capacity of the Goddard Room is to be possible now or in the future, the HVAC system repairs/ replacements must be performed with an understanding of the desired physical changes; now therefore,

BE IT RESOLVED that the Executive Director is authorized to secure the architectural services of Alfred R. Trevino, AIA for a study of economical approaches to expanding the seating and audio visual capacity of the Goddard conference room. The estimated cost of these services is \$3,400.

Due to the specialized and professional nature of the services to be procured, the competitive bid requirement is waived in accordance with Section 14.9 of the *Delaware River Basin Compact*.

This Resolution shall take effect immediately.

Resolution Adopting the DRBC Fiscal Year 2011 Operating and Capital budgets. Consideration of this resolution was postponed to allow additional time for review.

Resolution Authorizing the Executive Director to Renew the Commission's 2001 Cooperative Agreement with Rutgers University for the Collection, Analysis and Interpretation of Ambient Air Samples to Support the Control of Toxic Substances in the Delaware Estuary. Dr. Fikslin explained that this resolution authorizes the Executive Director to renew a cooperative agreement that DRBC has had since 2001 with Rutgers University for sediment and air sampling, analysis and interpretation in connection with the Estuary Toxics Management Program. Because airborne PCBs have a significant effect on water concentrations of PCBs, which are targeted for reduction in accordance with a 2003 TMDL, a long-term monitoring program is needed to measure ambient PCB air concentrations on an ongoing basis. Shortly after EPA established Phase 1 TMDLs for PCBs in the Estuary in 2003, a network of air monitoring stations was established – including one site at the Lums Pond State Park in northern Delaware, another in Camden New Jersey, where high air concentrations have been measured, and a third at Rutgers University in New Brunswick, at a site that has been monitored consistently since 1995, and which affords an opportunity to measure long-term trends in the region. The air monitoring effort has been supported by EPA through DRBC's annual Section 106 (Clean Water Act) grant, and funds in an amount just under \$60,000 are allocated for this activity in the Section 106 work plan for 2010. Dr. Lisa Rodenburg of Rutgers, who has been the principal investigator since the DRBC and Rutgers first entered into an agreement for air and sediment sampling in 2001, is a widely recognized expert in the air deposition of contaminants as well in the movement of contaminants between air and water. In accordance with Section 14.9 of the Compact, competitive bidding requirements are waived when, as in this case, the services to be provided are of a specialized or professional nature.

Dr. Fikslin noted that because New Jersey is a signatory to the Compact and Rutgers is a state university, DRBC benefits from a reduced administrative cost rate in the proposed agreement, increasing the amount of work that can be done with the available funds. Dr. Fikslin added that EPA has for two years provided the Commission with additional funds to perform passive air studies, which are used to identify specific sources of PCBs. He noted that additional funds may again be awarded by EPA for this purpose, in particular to look at nitrogen parameters. Accordingly, the annual amount of the proposed agreement is limited to \$60,000 "or the amount of funds awarded".

Hearing no questions or comments, Dr. Howarth requested a motion to approve the resolution authorizing the Executive Director to renew the Commission's 2001 cooperative agreement with Rutgers University for the collection, analysis and interpretation of ambient air samples to support the control of toxic substances in the Delaware Estuary. Colonel DeLuca so moved, Mr. Sickels seconded his motion and Resolution No. 2010-1 was adopted by unanimous vote.

Public Dialogue. Because a number of individuals requested to address the Commissioners, Dr. Howarth established a time limit of three minutes for each speaker. A rough transcript of remarks offered during this part of the meeting is provided as an attachment.

After all speakers had been heard, a motion to adjourn the meeting was offered and seconded, and Dr. Howarth adjourned the Commission's business meeting of March 3, 2010.

/s/ Pamela M. Bush

Pamela M. Bush, Esquire
Commission Secretary

ATTACHMENT**TO DRBC MEETING MINUTES FOR MARCH 3, 2010****ROUGH TRANSCRIPT OF ORAL TESTIMONY
OFFERED DURING PUBLIC DIALOGUE SESSION**

A rough transcript of the Public Dialogue session follows. Text in brackets is paraphrased or inserted by the editor.

Richard Schneider, Delaware

Hello, my name is Richard Schneider. I'm here to talk about the fish kill by industry's outdated cooling systems. I need to note on the record and to inform everyone here that the Nuclear Regulatory Commission (NRC) when they review a permit for a facility like Salem, they don't even consider the fish kill caused by the cooling system. All they care about is that the system is cool. Open-loop, closed-loop – it's not even in their discussions, so don't assume that because they approve a 20-year extension for a nuclear plant that they've reviewed the fish kills. That's a very important fact – it's a state permit and it's also brought under review by the DRBC. But the NRC has nothing to do with the fish kill.

Also some good news in New Jersey: the New Jersey legislature is looking at the fish kill at two facilities. They have legislation pertaining to it – one with Oyster Creek and one with Salem, so very good news there that they are looking at the issue. Also I'd like to thank the NJDEP for their draft permit for the Oyster Creek and the work they're doing there. Hopefully they will move on to Salem and require closed-loop there also.

The next thing is this fish kill report that I'd like to submit to one of the members here. It's by Dr. Desmond Kahn from the Delaware Department of Natural Resources and Environmental Control (Delaware DNREC). He's a fish expert. It's the review of the weakfish and the striped bass kill at Salem Nuclear Plant. His report is an excellent report – in depth. It's an official report by DNREC. Could you please read it? It's an excellent report. He states that they kill two million weakfish in one year, which is more than all the weakfish caught commercially and recreationally in Delaware. That one facility – Salem – kills more than what is caught by the fishermen, yet it's allowed to continue. That's what we need to stop. Also, it's just one of the 50 species that the plant kills, so it doesn't discriminate – it kills them all. What's very important is that Salem draws in 3 billion gallons of water a day so we're talking the largest fish killing facility on the Delaware River, and now that permits are coming up for review again I ask the DRBC to seriously look at this issue and not allow it to continue. Cooling towers can be built and this should have been done 30 years ago when the Clean Water Act was passed. They've been getting away with it for 30 years and they will most likely get an extension at Salem, so let's not let them continue it for another 20 or 40 years. Please review this report. It's very important. Thank you.

Tracy Carluccio, Deputy Director, Delaware Riverkeeper Network

First of all, it's very good news about the request for funding from Congressmen Sestak and Hinchey to do a cumulative analysis of gas drilling. We certainly will be doing an action alert for our members to support that and certainly, as you know, our organization and many, many members of the public and other organizations have been calling for a cumulative analysis before any permits are given. I know the record is not open today on the Stone Energy Corporation dockets; however, I would like to make a request of the Commissioners and that is to extend the public comment period on the Stone dockets. It's supposed to end on March 12, and we will be submitting extensive written comment and have participated in the verbal comments, but there has been a very short period of time available for the public to comment on these very important dockets. Also I filed a Freedom of Information Act request which

the DRBC has not even been able to process yet. I think for the access of the public to the records and for the ability of the various other entities who want to review this and may not have had the time to focus on it yet, I respectfully request that the Stone Energy dockets public comment period be extended at least 30 days. That would still give you time to put that on your agenda for your May meeting. The public comment period really should be longer than 30 days, but at least 30 days should be fairly painless for you in terms of being able to not hold up the first time you have the opportunity to vote on these dockets. Thank you.

Larry Braverman, Damascus Citizens for Sustainability

Commissioners, thank you for your time and the complete crew being here. Your mandate is to provide enough water throughout the basin at a drinkable and sustainable level. As we see at a global level the first thing asked for is water to sustain life. Life can only exist with water. Take it away, no life. This is a universal thing; the battle to keep the water clean shows up everywhere – septic, runoff and industrial. The water can only hold so much, then it can't sustain healthy life. Are you, our stewards, going to risk this for gas? Open your eyes and look at the water problems around the world. Stand up and stop this Goliath from coming here. We have a pristine system and a non-replaceable commodity. Vote no.

James Barth, Damascus Citizens for Sustainability

I'm a rational person. In order to maintain my own sanity, logic and law must rule the actions of men and women and especially a body that governs men and women. I am an emotional person; justice must exist at the heart of all law. The gas extraction industry cannot be allowed to operate 24 hours per day, 365 days per year. They cannot be allowed to drill and fracture in this fashion several hundred feet from an unwilling person's home, exposing such people too. If eight wells are placed on a pad, 48 months of noise, air and light pollution from this one pad. When each well is re-fractured, the wounds are opened again. We people cannot live under a constant threat to our water and life. We should not be forced to live next to condensate tanks, transmission lines and compressor stations not built to green technology standards. We cannot afford to have our water tested at our own great expense multiple times per year.

The industry is allowed to operate 24/7-365 in order to make gas extraction profitable. This subsidy given to the industry is borne on the backs of all citizens who are subject to the pain and suffering that result. It is grossly unjust that I should be subjected to this pain and suffering so that industry can make a huge profit. Until now I do not truly understand the rallying cry "No justice – No peace!" Since July of last year the DRBC has attempted to proceed in a piecemeal fashion. This defies logic and denies justice. There must be a cumulative environmental impact study before allowing any permitting to proceed. Water and air must not be allowed to become contaminated whether in a nine-square-mile area such as Dimock or a forty mile long stream as in Dunkard Creek. Whether caused by acid mine drainage or hydraulic fracturing waste flowback, or both, what is absolutely clear has been the utter failure of the environmental protection agencies, PADEP, WVDEP, USEPA, to protect the creek, its aquatic life and the citizens in the area. I ask again for the DRBC to not permit drilling in either a piecemeal or fast track process. The DRBC must complete the formulation of its rules and regulations that govern gas mining in the basin. They must be uniform within the basin and must be publicly reviewed before adoption. I ask the DRBC to declare a moratorium until this is done. The USEPA is about to perform federally funded studies on the impacts of the gas extraction industry upon our water and air. I ask that the DRBC wait to complete its rules and regulations until these studies are completed and the findings incorporated into the DRBC's law. The daily injustice that the gas mining industry is allowed to perform must be stopped; the rules and regulations under which they operate must be changed. There will be no peace without justice. Thank you.

Edward Nocera

Thank you for the opportunity to speak to the Commission. I strongly urge the DRBC to deny permits for water withdrawal for any gas well, drilling and fracking until an environmental impact study is made, regulations are drawn and enforcement put into place. To move forward at this time with none or very little in place is reckless and condemning to the river valley and all its inhabitants. Once drilling and fracking begin in earnest we will have crossed a threshold from which there can be no return.

I would also like to comment about what is called a test well. The Robson Well, a so-called test well, was drilled without a permit from the DRBC because it was drilled into the Oriskany layer and not Marcellus Shale and was allowed. It is in Wayne County within the Delaware River Basin and its runoff eventually reaches the river. In mid-August shortly after the site was shut down, Damascus Citizens for Sustainability noticed a large tree and several others in the area dying. They arranged a fly-over of the Robson site and photographed the damage. Their attorney, Jeff Zimmerman, filed a complaint with PADEP. PADEP tested the site and found it to be contaminated. If this is the first of many test wells to come, this is evidence of negligence on the part of the drillers and must be put in check. Again, along with other citizens, I respectfully exhort the Commission to have the appropriate studies completed before the basin becomes an environmental disaster. A moratorium must be put on all drilling, including test wells. I have a question about test wells: how did that get to be that they went around the DRBC? [Ms. Collier replied that the Commission did not include the test wells because DRBC was principally interested in the quantity of water used. Accordingly, DRBC focused on fracturing of shale formations, which requires large quantities of water. In response to a question from Mr. Nocera as to whether a test well could ultimately be used for production and fracked, Ms. Collier replied that it could, but the operator would require a docket from the DRBC first.

Bernard Handler, Damascus Citizens for Sustainability

The whole country is changing their regulations right now on gas drilling. Even in Texas they're monitoring air. Pennsylvania is going through re-regulations on drilling as well as wastewater. New York State is in a moratorium, the EPA is looking into it. The Congress is looking into it and today I saw an article saying that the EPA and Congress are going to work together more and look at more than just the water. They'll be looking at the drilling muds as well as the water treatment. These are big issues and the DRBC is coming up with their regulations. It's my belief that the DRBC's regulations should be stronger since you're controlling Special Protection Waters. So they should be stronger than any of the other regulations that have passed by either of the states and not just follow suit. That's my first comment.

There's an article today that I found from the Tompkins Weekly, and basically it has to do with health impacts. The part that interests me the most – and I mentioned this the other day – the drilling stone that comes out of the wells is contaminated. The types of elements that are in there are arsenic, barium, strontium, chromium, as well as uranium, [inaudible] and radium. In New York State they found a lot of wells with 250 times the amount of radium. In Dimock, Pennsylvania, not that far from Wayne County, they found 15-16 times the amount of radium. When they drill these wells, including the test wells – nine are proposed in Wayne County right now – they just bury this stuff in the earth. In the Matoushek Well they are just going to encase it in cement and throw it under the ground. Well cement doesn't last forever, the plastic linings that they're in are, first off, contaminated themselves and they rip. This is above our water table. I'm very glad about the study and the possibility for money for the study of cumulative effect. Right now you have nine test wells that are going to be burying substance under the earth. The other day Marian Schweighofer showed a picture of Wayne County with 80 percent leased. Unless something is done immediately there is going to be environmental effect and it's going to be very negative, so you need to do an environmental impact study and cumulative impact before you allow any drilling into the basin. Thank you.

Dr. Barbara Dykstra

I'd like to speak a little bit about human rights to water and responsibilities. Kaufi Anan the former U.N. Secretary General said that access to safe water is a fundamental safe need and therefore a basic human right. Contaminated water jeopardizes both the physical and social health of all people. It's an affront to all people. Historically, in several international conventions and declarations, human rights have been incorporated. The right to health was first recognized in 1946 when the constitution of the World Health Organization stated that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being. This right extends to the underlying determinants of health, and central among these is safe water. As a pediatrician I advocate for children's rights, and Article 24 of the Convention on the Rights of the Child in 1989 guaranteed that children are entitled to the enjoyment of the highest attainable standard of health, which requires that state parties (governments) take appropriate measures to combat disease and malnutrition, which includes the provision of clean drinking water. Lack of accessible safe water increases the vulnerability of children to diseases. Their immune systems and their detoxification mechanisms are not fully developed, so they are often less able to respond to water-related toxicity. Children also have less body mass than adults. This means that a water-borne chemical may be dangerous for a child at a concentration that is relatively harmless to an adult.

Human rights are protected by internationally guaranteed standards such as these conventions and others and furthered by governments. Governments are the primary duty-bearers, and they must take concrete steps to protect and respect and fulfill the right to water and to ensure that anyone operating within their jurisdictions – individuals, communities, civil society and the private sector do the same. Governments are mandated by morality and by these conventions to respect the safety of water and to ensure that we have adequate drinking water.

Governments should take steps to ensure that children are not prevented from enjoying these human rights due to lack of adequate water in educational institutions and households. This is happening currently in Dimock, Pennsylvania. The provision of adequate water to educational institutions should be addressed, and there is a school in Dimock where the children are suffering for that reason.

In our Delaware River Basin the DRBC is one such governmental institution which is mandated by the states it serves and mandated by its people to ensure safe drinking water and the adequacy of it for all of the numerous activities that sustain human life and ensure human dignity. The DRBC is accountable for the preservation of this human right because it is a governmental agency, this human right to safe water.

I really am very pleased to hear Director Collier announce that there will be a cumulative impact study. [Ms. Collier interjected to state that DRBC had submitted an application for funding. Dr. Dykstra said she was optimistic and that she would also like to suggest that a health impact study be included in that.] Thank you very much.

Josh Fox, Filmmaker

I've been here at the DRBC mostly filming, talking about gas drilling. I've been all across the nation – to 34 states. My film premiered at Sundance and won the Special Jury Prize and won the division award at the Big Sky Film Festival, and won the Audience Award at Denton, Texas. It will have a wide commercial release as well as a targeted release within all types of communities soon. I'm here today to talk about these test wells, these "exploratory wells." There is no difference in terms of the pad. I don't know if you have this [pointing to a photograph] but this is the pad of the Robson Well, which shows a great deal of contamination. It shows that there is low pH. It shows that there is barium all throughout the soil. Those are the things that are consistent with all the gas wells that I've studied across the nation. It seems to me there is no difference between drilling muds that are filled with barium and possibly diesel,

which we know is illegal but the companies themselves don't admit to using diesel in their own testimony to Congress. All over these sites and fracturing sites there's just levels of contamination. I think all of them are unacceptable as to be included in whatever cumulative impact study. It doesn't make any sense to go ahead and allow nine test wells and we'll add one of them. These [pointing to a map] are in Wayne County and some of them are very close to me, and we will continue to cover this in the media and if there is any activity we'll be there with cameras blazing to make sure people understand what's happening. But if you don't have this and you haven't had it supplied to you, I also want to echo what Tracy said about extending the public comment period. It's not long enough. I was disappointed that the Commissioners did not show up on February 24 where I offered to show you the film in a private screening and also to open up our 250 hours worth of footage from all over the country to study that. Now I haven't made any money doing this at all. This is my free time. So coming back here time and time again is exhausting, but I think that even in the three-week period that you opened up, you couldn't review that 250 hours of footage at 8 hours a day reviewing it. This is the kind of study that I would expect from the Commission that is actually charged with protecting places that these people live in in this river basin in perpetuity. So in terms of the exploratory wells, they can be vented. They can hit pockets of gas, they can hit pockets of H₂S, they can hit pockets of volatile organics that come up. I've stood in the kitchen of people who lived a mile away from a well that were exposed to 15 minutes of a toxic cloud and have gone down for eight or nine months and been in the hospital because of neurological effects and other things that have happened to them. These are not safe to permit or essentially to say we don't need to permit them because they're not being fracked. They are a real danger to public health and they should be included in your jurisdiction and if they're not, there's going to have to be some kind of action because I won't be able to comfortably stay in my house. I won't be able to comfortably go to sleep at night because that's what most of these people I've talked to around the nation say, we don't know if we're going to wake up in the morning because we have H₂S. The seriousness of this keeps me coming back here, and I want to repeat that I'm happy to set up something where we show the film, where it would for you to be able to come in and share this testimony from around the nation, which is not just a question of people being on camera but also their individual research that they had the burden of proof of their water tests, their soil tests, their air samples, all that kind of stuff. I would hope that whatever you are applying for [referring to a DRBC request for funding for in impact analysis] you can at least put the brakes on these nine or so exploratory wells. It's a huge issue and the industry is trying to come in here and establish a foothold.

Barbara Arrindell

The Robson Well – the complaint was made to the DEP and the DRBC – it's a test well, and the DRBC chose to not look at the complaint. There's no such thing as a test well in Pennsylvania. It was given a drill and operate permit, and so were all the test wells to come – the nine so far that they're talking about. The test wells in other areas of Pennsylvania aren't put into production. The Robson complaint shows the area of contamination, and I have a complaint to give you again – some of all the material that is on the DCS [Damascus Citizens for Sustainability] web site about it and one of the articles I will refer to. This contamination has been verified by the DEP, although until last week DCS who made the complaint has not been able to get either the Notice of Violation, which we still haven't gotten, that was sent to Chesapeake or the DEP's test results that we now have some of and they clearly show that something is amiss. We're going to have some scientists look at these results, and from our preliminary analysis it looks like drilling muds were dumped off the back of the site or ran through it under the gravel, the pad, and then off-site. The only materials tested for are barium, diesel range organics, oil, grease and low pH. No tests for other metals or radioactivity or other materials were done. DCS will share the results of our scientists' analysis of the DEP Robson Chesapeake testing with the Basin Commission and hopefully you will be interested. Nine wells advertised by Hess Newfield as test wells must not be ignored by the DRBC. Just like the Robson test well, they will have consequences. DRBC must evaluate the cumulative impacts of gas drilling, including test wells, before allowing drilling to start. We heartily support the new

information that the directors reveal today. We will help in any way to advance this. We do also insist that no permits be issued until the study is done and that no test wells be allowed to proceed until that study is completed.

Joe Levine, Damascus Citizens for Sustainability and NY-H₂O

Did you make a request for funding for an environmental impact statement? [Ms. Collier affirmed this, explaining that the request was for a federal appropriation.] That is absolutely fantastic news, and we presume it's because you understand that this issue is complex and in need of such. We're very happy to hear this and we know that the New York City Hazen & Sawyer report had dramatic findings that should put this Commission on notice and pause for permitting anything until further study is done to avoid something that's characterized as "catastrophic risks to the water supply". With that in mind, it would seem that if this Commission is seeking to do that study, this Commission understands that it's important enough that actually for anything like test wells in the basin or any other kind of drilling, there should be a moratorium on it until this study is done. Otherwise, I've heard five wells and we've heard 10 wells. Is there a limit to the amount of test wells? You are not saying yes or no to test wells at all. What would be the limit of test wells? Might there be 20,000 test wells? I don't know. There is cumulative impact with these test wells, so if there are ten wells there are still cumulative impacts with those test wells. The one well – the model well that we've been watching – has proven to come up positive on the four tests that they made. So it's a very serious endeavor even to do one test well, and by the way that Robson test well has runoff and that does make its way to the Delaware. With that in mind, it really doesn't seem to make any sense to rush this project. Prudence is what should rule the day here, especially by this Commission. That the gas is going to be there we don't really need a test, and to allow test wells to be drilled is just avoiding the ultimate responsibility which you are now embarking on, which is a comprehensive cumulative impact study. I praise the Commission for taking that gigantic, appropriate step. Thank you very much.

Elaine Reichart

Are you going to make a determination, since you know this funding may be happening, are you going to halt this or are you going to continue? Because if the answer is you're not going to halt things, then give the money back because why do a study if you're going to allow this to happen before the study? It makes no sense, and as a taxpayer, why spend my money if you're not going to do it in the right order? Do you have a quick answer on that because I don't want to waste my three minutes? [Dr. Howarth said no, but said the Commission understood Ms. Reichart's point.]

Second, I want to ask about transparency, specifically concerning February 16. I submitted a FOIA request, and Tracy [Tracy Carluccio of the Delaware Riverkeeper Network], I'm glad to see I'm not the only one who doesn't get their FOIA request answered. I asked to see the alternative dissenting opinion regarding the flood analysis model and it was something that Bob Tudor mentioned at the December 15 meeting, and I'd really like to see that and I haven't gotten a response. February 17th I submitted a FOIA request asking for some information regarding the Stone Energy project – that is, any files containing Stone Energy project facts leading up to the December 10, 2008 agreement, as well as any files prior to the subsequent well applications. Specifically, I'm looking for information prior to the above-mentioned agreement that includes any and all correspondence between Pennsylvania DEP to/from DRBC members or staff and/or to/from Stone Energy dated January 1, 2008 up to and including December 10, 2008; copies of the files that contain physical addresses and maps of the well, including exact well location on the property, intake staging area, intake locations, trucking and/or storage facilities. Electronic copies would be preferred. I've not received any information about my request and both of these are over the allotted 10-day request response.

Third, as you know, I recently requested to attend caucus meetings and that was denied as of yesterday. I've been doing some research on the Compact and I ran across language in the Compact that clearly states, "All meetings of the Commission shall be open to the public." "Meetings among Commissioners and key staff held prior to each Commission Meeting" does not appear anywhere in the Compact; therefore the caucus is a meeting and therefore should be open to the public. Now, not only is everyone here in violation of the Compact law, which is the concurrent legislation at the federal and states, but I would venture to say even though I'm not a lawyer, that each one of the Commissioners or representatives are violating their own respective state laws on open public meetings. But that is something that I hope that we can discuss going forward on an on-going basis.

I have other questions on the Reassessment that was supposed to have been started on. The Commissioner from Delaware did make a statement on the FFMP back when it was put in place that you would come up with a revised plan on or about the summer of 2009. That has happened. Carol, I've called you in December and asked for a Christmas present of getting together with the folks on the flood analysis model. You said no, but in a December 15 meeting, Bob said that we would be able to get together in a small group and go over the model. That's never happened. You said before in the morning meeting that this is a model that can be used in other places. Well, I sure hope not, because there's not much transparency going on here. OST is a model that New York City is using in place of the OASIS. There's a problem here. It's a prototype, it's used on the Delaware River reservoirs – the OST model – to include precipitation, analogues and things of that nature to decide how the pass-by levels are going to be used or maintained in the Delaware River reservoirs by New York City. Well, I mean does the Commission get to see what's in this model? Is it a proprietary model?

All these questions and my three minutes are up, but how and when can you answer my questions, because with only five meetings a year and three minutes at each meeting, these things aren't going to be answered, so how can you help me get my answers? [Dr. Howarth summarized that Ms. Reichart had brought up reassessment of the FFMP, the flood analysis model, FOIA requests and OST. She asked whether it would be appropriate to include an update on some of these issues during the next morning conference session. She noted that the staff was working on so many priorities – flooding, ecological flows, dwarf wedgemussel habitat, natural gas – that it was difficult to place one above the others. She noted that it might be helpful to the public and helpful for Commissioners to spend ten minutes per topic to update everyone and asked whether that sounded like a reasonable way to help Elaine and the other members. Ms. Reichart said she did not think that approach would answer people's specific questions. Dr. Howarth explained by way of response to one of Ms. Reichart's stated concerns, that the OST model was not complete but was still under development. Ms. Reichart said she understood that OST was a prototype.] But the question I have is relative to – one of the problems I have with aspects of the OASIS model, for example, is that there are a few different versions of it. New York City has their version, and Dr. Kolesar said this in his testimony one day, New York City has a more robust model. Well isn't that just dandy because how could anyone else figure out what the drought days are? So not being a suspicious person, but I'm kind of thinking now here's an opportunity for New York City to take different feeds from proprietary systems and put them together into one proprietary system and then hand a number out of the black box to the DRBC and say, 'Deal with it. This is what we're going to give you.' How are you going to verify what their OST model says? [Dr. Howarth asked whether she had any other questions.] How and when can I get my questions answered? [Ms. Collier noted that Ms. Reichart received an answer regarding the caucus meeting. Ms. Bush said that DRBC's FOIA regulations, which are published on the web site, provide that staff respond within 10 days. If staff is unable to produce the requested documents within that time, the requester should be told approximately when he or she will receive them. She said that such a response should have been provided within ten days and invited Ms. Reichart to write a an email directly to her if this should occur again in the future, and she would respond promptly. She added that staff had been very busy and had missed working days because of snow storms,

and she acknowledged that as a result, staff were behind in responding to FOIAs. She assured Ms. Reichart that she would receive a response that week. Mr. Tudor invited Ms. Reichart to come to his office at 4:00 p.m. after the meeting adjourned, and he would answer 90 percent of her questions. Ms. Reichart said that sounded good. Dr. Howarth agreed.]

James Barth

Mr. Barth asked about a test well structure and whether that was permitted and about the variable cuttings, the filings. The first is, is a horizontal, let's say it's not going to be a production well and they're not going to be using an overly large amount of water, but it is drilled horizontal, it's not fractured or anything. But right now when I think of a test well I think of straight down vertical and that's that. So my question is, can a test well be drilled where they go out x amount of feet on a horizontal within the Marcellus Shale or any other strata? [Mr. Muszynski said it was his understanding that test wells were vertical.] Mr. Barth said how would you know? For example, obviously the applications are filed with PADEP, and as Barbara earlier mentioned, all wells are in a sense production permits. How would you know that it's not? I ask this question because in relation to cuttings and their burial, I heard that John H. Marshall, who described himself as a hydrogeologist for the USGS in Pennsylvania and New York State for 29 years, gave testimony after the DSGEIS [New York DEC's Draft Supplemental Generic Environmental Impact Statement], and he described the cuttings as Lasher described them, as being filled with pyrite within the Marcellus area, and that horizontally will contain somewhere between 100 and 500 times the amount of pyrite as a simple vertical well, and currently they are allowed to be buried onsite, that pyrite – produced pyrite – is like acid mine drainage and it will in his belief create a great possibility for the contamination of the aquifer. Who would I send this to? [David Kovach of DRBC noted that pyrite is a fairly common mineral in shale formations. In some instances it may have been deposited from mountainsides in a depositional phase. In others, it may actually have been formed during metamorphosis of the shale. Mr. Kovach noted that there is a component of sulfur in pyrite when it weathers, breaks down and becomes mixed with water. He said that there would be 500 times more pyrite generated by a horizontal well because the well itself was that much longer. As to whether the pyrite in well cuttings could contaminate an aquifer, Mr. Kovach said he could not provide a general answer.]

Mary Ellen Noble, Delaware Riverkeeper Network

Tracy has already said it but we really do appreciate it and think you should extend this comment period, especially given that we still need to get access to FOIA stuff that we've been looking for and we've only got a few days both to hear back from you folks, to put it together, look at it and write about it. We're looking for an extension of this comment period. While you're about doing that, we've got a lot of people down basin here who didn't get on the bus to go up to an all-day trip to Matamoras who would very much appreciate another hearing in this area. That leads me to a subject that I didn't come up with during my three minutes in Matamoras, which is mud – not drilling muds, just plain mud. We're talking about miles of dirt roads, construction roads, paths, slopes. I asked someone today when they build a feeder pipeline what's the area of disturbance. He was talking about 25 feet for initial disturbance and 10 feet for a maintained right of way. I was just shocked at 25 feet – I mean, what kinds of monster machines have they got to do that with? But we're talking about a lot of disturbance. I'm talking about just plain mud. That should be a major part of any comprehensive review of the impacts, because we all know about mud and we all know that non-point source [pollution] is one of our major problems in dealing with water quality, and it's a lot sexier to talk about the real nasties, but the mud is a significant thing that we should be looking at. It worries me that I don't see yet the Commission looking at sites and location of these things. I hope the Commission is not going to step away from that, not only in terms of proximity to waterways and wetlands and such, but also in terms of mud. [Dr. Howarth reminded everyone that this was not a hearing on the Stone Energy docket.] I understood but I was totally blown away by the idea that the Robson Well went in just because it was a vertical well and it wasn't a

production well, and I don't think test well, vertical well, whatever it is, it's all part of the same kettle of fish and one hopes for the fish not to get into that particular kettle.

Josh Fox

Just one question about water testing, and this is brought up in relationship to the Stone Energy permits. They said within a thousand feet there would be water testing done. If you are not looking at this exploratory well issue and certainly questions of access roads, I would ask if you would consider doing the water testing around those, since we've already seen contamination of those sites.

Elaine Reichart

The water resources document [Water Resources Program] that was going to be discussed today or voted on today, is that something that needs to be publicly noticed and is that something that you will have a hearing on? [Ms. Bush said the Water Resources Program had been posted on the DRBC website. She said that it was hoped it would receive a hearing in May.]