BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
PUBLIC WATER SUPPLIES:)	R18-17
PROPOSED NEW 35 ILL. ADM)	
CODE 604 AND AMENDMENTS.)	(Rulemaking- Water)
TO 35 ILL. ADM CODE PARTS 601,)	,
602, 607 AND 611)	

NOTICE OF FILING

PLEASE TAKE NOTICE that I have electronically filed today with the Illinois Pollution Control Board Illinois EPA's <u>PRE-FILED TESTIMONY OF RICHARD P. COBB, P.G.</u> for the above captioned rulemaking, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: /s/Joanne M. Olson

Joanne M. Olson Assistant Counsel

Division of Legal Counsel

DATED: August 31, 2017

Joanne M. Olson #6293500 1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	R2018-017
PUBLIC WATER SUPPLIES:)	
PROPOSED NEW 35 ILL. ADM)	
CODE 604 AND AMENDMENTS.)	(Rulemaking- Water)
TO 35 ILL. ADM CODE PARTS 601,)	
602, 607 AND 611)	

PRE-FILED TESTIMONY OF RICHARD P. COBB, P.G.

My name is Richard P. Cobb. I am a licensed professional geologist and the Deputy Manager, Division of Public Water Supplies (DPWS, Bureau of Water ("BOW")), at the Illinois Environmental Protection Agency ("Illinois EPA" or "Agency"). I am also the manager of the Agency's Groundwater Section. Since 1985, I have worked on the development of legislation, rules and regulations related to protecting, monitoring and assessing, and restoring groundwater. I represent the Director as Chair of the Interagency Coordinating Committee on Groundwater ("ICCG") (415 ILCS 55/4), and serve as ICCG liaison to the Governor-appointed Groundwater Advisory Council ("GAC") (415 ILCS 55/5). I have served as a primary Agency witness at Illinois Pollution Control Board ("Board") proceedings in the matter of groundwater quality standards, technology control regulations, regulated recharge areas, maximum setback zones, clean-up regulations, radionuclide release reporting, right-to-know, and water well setback zone exceptions. Furthermore, I have served as a primary Agency witness in enforcement cases under these laws and regulations.

Further, as the deputy drinking water program administrator, I assist with implementing the public water supervision program under the federal Safe Drinking Water Act ("SDWA"). Additionally, my responsibility includes the integration of source water protection with traditional water supply engineering and treatment practices, and to further assist with linking Clean Water

Act, SDWA, and groundwater programs. The Groundwater Section applies Geographic Information System programs, global positioning system technology, hydrogeologic models (including, 3D geologic visualization, vadose zone, groundwater flow, particle tracking, solute transport, and geochemical models), and geostatistical programs for groundwater protection and remediation. The Groundwater Section also monitors and assesses groundwater quality in community water supplies on a state-wide basis, and inventories and evaluates potential contamination threats to encourage source water protection program implementation: Moreover, I represent the BOW on Illinois EPA's Contaminant Evaluation Group, Strategic Management Planning Team, and Environmental Justice Committee. For further details on my qualifications I have enclosed a copy of my Curriculum Vitae.

The purpose of my testimony is to support Subpart B: Source Development of Part 604 and Subpart C: Source Water Protection Plan. James Salzman's, *Drinking Water – A History*, 2012, indicates:

From earliest times, human societies have faced the challenge of supplying adequate quality and quantities of drinking water. Whether limited by arid environments or urbanization, provision of clean drinking water is a prerequisite of any enduring society, but it is a daunting task for drinking water is a multi-faceted resource. Drinking water is most obviously a physical resource, one of the few truly essential requirements for life. Drinking water is also a cultural resource, of religious significance in many societies; a social resource, access to water reveals much about membership in society; a political resource, the provision of water to citizens can serve important communication purposes; and finally, when scarce, water can become an economic resource. As recent conflicts in developing countries make clear, managing and mediating these many facets of drinking water is no easy matter.

SUBPART B: SOURCE DEVELOPMENT

Proposed Section 604.200 sets forth the general requirements of source water development, which provides: "Each water supply must take its raw water from the best available source, which is economically reasonable and technically possible." This is the foundation of drinking water regulations. This key requirement was codified in the Board's first adopted regulations governing

public water supplies on January 3, 1975 in *Re: Public Water Supplies*, R73-13, Opinion and Order, but its origins go all the way back to the Greek physician Hippocrates (460-370 BC). From source to tap, Illinois EPA uses a multi-barrier approach to assure Illinois citizens with sufficient quantities of high-quality drinking water from community water supplies ("CWS") pursuant to 415 ILCS 5/14 and Part 601.101. The multi-barrier approach involves several consecutive steps, including selection of high quality-source water(s), source water protection ("SWP"), optimized water treatment as necessary, distribution system management, and water quality monitoring.

Part 653 has required CWS wells to be constructed based on Recommended Standards for Water Works ("Standards") (1982 version) and the American Water Works Association ("AWWA") A100 Standard for Deep wells for decades. Illinois EPA is proposing well specific empirical data be determined and provided to supplement the existing definitions and general requirements recently adopted by the Board under Parts 601 and 602, respectively. The new definitions adopted by the Board in Part 601, are as follows:

"Aquifer Property Data" means the porosity, hydraulic conductivity, transmissivity and storage coefficient of an aquifer, head and hydraulic gradient.

"Head" means the sum of the elevation head, pressure head and velocity head at a given point in an aquifer.

"Hydraulic Conductivity" means the rate of flow in gallons per day (gpd) through a cross section of one square foot (ft²) under a unit hydraulic gradient (gpd/ft²).

"Hydraulic Gradient" means the rate of change of total head per unit distance of flow in a given direction.

"Porosity" means the percentage of the bulk volume of a rock or soil that is occupied by interstices, whether isolated or connected, as defined by the ratio of the pore volume to the total volume of a representative sample of the medium.

"Storage Coefficient" means the volume of water an aquifer releases from or takes into storage per unit surface area of the aquifer per unit change in head.

"Transmissivity" means the rate in gallons per minute (gpm), at which water is transmitted horizontally through a unit width by the total saturated thickness of an aquifer, in feet (ft), under a unit hydraulic gradient (gpm/ft).

"Well Hydraulics" means equations that are applied to understand the effect that a pumping well structure has on inducing the movement of water through permeable rock formations and certain aquifer properties to determine the rate of withdrawal of the well. This term is inclusive of equations that quantify wellbore skin effects/well loss.

"Wellhead Protection Area" or "WHPA" means the surface and subsurface recharge area surrounding a community water supply well or well field, delineated outside of any applicable setback zones (pursuant to Section 17.1 of the Act) established pursuant to Illinois' Wellhead Protection Program, through which contaminants are reasonably likely to move toward the well or well field.

"Wellhead Protection Measures" means management practices needed to mitigate existing and future threats to the water quality within the delineated WHPA.

"Wellhead Protection Program" means the Wellhead Protection Program for the State of Illinois, approved by USEPA under section 1428 of the SDWA (42 USC 300h-7).

This well hydraulic and aquifer property data support delineation of wellhead protection areas ("WHPA"). Moreover, this data is needed for SWP of groundwater sources of CWS as proposed in Part 604, Subpart C. For example; this data helps in the establishment of maximum setback zones pursuant to 415 ILCS 5/14.3 and Part 671, and defining the boundary of a regulated recharge area adopted by the Board pursuant to 415 ILCS 5/17.4 for protecting CWS wells. In addition, this data is used to determine the quantity of water the well can safely produce without endangering the pump equipment or the aquifer.

Part 653 and the 1982 Recommended Standards have always included requirements for: General Well Construction; Well; Aquifer Types and Construction Methods; and Well Pumps, Discharge Piping and Appurtenances. The Agency's current proposal incorporates the most up to date version of the Recommended Standards and AWWA standards. The Illinois EPA has included, with modifications, the general well construction provisions found in the Recommended Standards, Section 3.2.4. This proposed section includes requirements on well casing materials,

packers, screens, grouting, upper terminal well construction, development, capping and well abandonment. Illinois EPA proposes that all well casing be made of steel because it is more reliable and a longer lasting material than PVC. Additionally, steel casing reduces potential for contaminants to enter the well. Further, we propose that the minimum depth of grouting shall be 10 feet based on our current rules in Section 653.103(c). The 10-foot depth of grout will minimize the potential for migration of contaminants from the surface into the well. The Illinois EPA has not included the use of a clay and bentonite seal for grouting due to the lack of the ability to ensure the quality of the clay and bentonite mixture. Moreover, the potential for these materials to dry out and not provide a proper seal near the surface. The proposed regulations require that neat cement be used for grouting the well casings.

The following proposed sections for surface water sources of CWS are in the 1982 and updated Recommended Standards that were incorporated by reference but are not in Part 653: Surface Water Quantity; Surface Water Quality; and Surface Water Structures; Reservoirs and Zebra Mussel Control. Therefore, to assure the provision of a safe and adequate drinking water from surface water sources pursuant to 415 ILCS 14 and Part 601.101, the Illinois EPA is proposing (consistent with the updated Recommended Standards) that for a new surface water source (including, all tributary streams and drainage basins, natural lakes and artificial reservoirs or impoundments above the point of water supply intake in the watershed) that it must be determined and provided to the Agency, if: the quantity of water is adequate to meet the maximum projected water demand of the service area as shown by calculations based on a one in fifty year drought or the extreme drought of record; and considering further multiple year droughts. Further, we are proposing that new surface water sources of CWS must provide a reasonable surplus for anticipated growth; compensate for all losses such as silting, evaporation, and seepage.

In addition, Illinois EPA proposes that a source water assessment must be completed and be submitted to the Agency of the factors, both natural and manmade, which may affect water quality. The source water assessment, provided to the Agency, should to the extent practicable determine; the possible future uses of impoundments or reservoirs; the degree of control of watershed by owner; and assess the potential and existing sources of contamination in the source water protection area. Moreover, a minimum of 8 samples must be collected over a year to statistically represent the seasonal microbiological, physical, chemical, and radiological characteristics of the surface water. This source water quality assessment must also determine the capability of the proposed treatment process to remove contaminants to meet Part 611. Utilizing the results of the assessment, the design of the water treatment plant must consider the worst-case conditions during the life of the facility.

Illinois EPA also proposes requirements for new surface water intake structures based on Section 3.1.4 of the Recommended Standards. This includes provisions to control zebra mussels. Zebra Mussel Control is a based on a policy statement in the Recommended Standards. Requirements for impoundments and reservoir preparation and construction are proposed based on Section 3.1.5 of the Recommended Standards.

SUBPART C: SOURCE WATER PROTECTION PLAN

The objective of SWP is to maintain, safeguard, and/or improve the quality and quantity of source water utilized by CWS in Illinois. These new proposed requirements were primarily based on AWWA's G300-07 Source Water Protection Standard that became effective July 1, 2007. Each CWS that treats surface or groundwater as a primary or emergency supply of water must develop a SWP plan that contains the following minimum elements: a vision statement; a source water assessment; the objectives; and an action plan. The Illinois EPA made the requirements in

this proposal as flexible as possible. The objectives that drive the plan are based on the resources that a system has so that they will be achievable. These requirements are also phased-in a manner like what Minnesota and Indiana have in place. Moreover, Illinois EPA will provide technical assistance with preparing the source water assessments.

The potential incentives for implementation of a SWP include, but are not limited to the following:

- Greater public health protection by ensuring higher quality raw water, especially for sensitive subpopulations. In addition to reduced illnesses and mortalities, public health protection can provide economic benefits.
- Providing a way to respond to uncertainties presented by growing number of unknown or unregulated microbiological and chemical contamination (i.e. preventing contamination that treatment may not remove).
- Avoiding costs of contamination, including
 - o Reducing water treatment challenges and costs (e.g., more consistent influent quality, and lower current and future capital and operating costs0;
 - Saving potential future expenses associated with land and water contamination remediation;
 - o Saving monitoring, engineering and legal expenses;
 - o Saving expenses related to finding and obtaining alternate water supplies; and
 - Reducing the potential for more indirect financial costs, such as real estate devaluation or lost jobs and tax revenue.
- Greater likelihood of complying with existing and future drinking water regulations.

A clear and important aspect of SWP is that pollution prevention is preferable to remediating or treating contaminated source water. SWP programs should provide a means to

7

assess and prevent future contamination, and should not just empathize reducing current contamination.

This concludes my pre-filed testimony. I will supplement the testimony as needed during the hearing and am happy to address any questions.

Respectfully submitted,

By: /s/ Richard P. Cobb

Richard P. Cobb, P.G. Deputy Division Manager Division of Public Water Supplies

DATE:_ August 31, 2017

Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276

CURRICULUM VITAE of RICHARD P. COBB, P.G.

I. Work Experience

Deputy Division Manager, Division of Public Water Supplies (DPWS), Bureau of Water (BOW), Illinois Environmental Protection Agency (EPA). (5/02- Present) My primary responsibilities include managing the: Groundwater Section. Further, I assist with administering the public water supervision program under the federal Safe Drinking Water Act ("SDWA") and the Wellhead Protection Program ("WHPP") approved by the United States Environmental Protection Agency ('U.S. EPA"). The Groundwater Section applies Geographic Information System ("GIS") programs, global positioning system ("GPS") technology, hydrogeologic models (3D geologic visualization, vadose zone, groundwater flow, groundwater particle tracking, solute transport, and geochemical models), and geostatistical programs for groundwater protection and remediation projects. The Groundwater Section also continues to operate a statewide ambient groundwater monitoring program for the assessment of groundwater protection and restoration programs. Additionally, my responsibility includes the integration of source water protection with traditional water supply engineering and treatment practices, and to further assist with linking Clean Water Act and SDWA programs.

I also do extensive coordination with federal, state and local stakeholders. I am the Illinois EPA liaison to the Governor appointed Groundwater Advisory Council ("GAC"), and I am the Director's designee to chair the Interagency Coordinating Committee on Groundwater ("ICCG"). I also coordinate with four Priority Groundwater Protection Planning Committees, Illinois Source Water Protection Technical and Citizens Advisory Committee, and with the Ground Water Protection Council ("GWPC"), Association of State Drinking Water Administrators ("ASDWA"), and the Association of State and Interstate Water Pollution Control Administrators ("ASWIPCA") to develop and implement groundwater protection policy, plans, and programs. I currently represent the U.S. EPA Region V States on the GWPC Board of Directors. I represent the BOW on Illinois EPA's: Contaminant Evaluation Group ("CEG") making Right-to-Know law recommendations; Strategic Management Planning Team; Environmental Justice Committee; GIS Steering Committee; Information Management Steering Committee; and Leadership in Energy and Environmental Design for Existing Building ("LEED-EB") Committee.

Since starting with Illinois EPA in 1985, I have worked on the development of legislation, rules and regulations. I have also served as a primary Illinois EPA witness before Senate and House legislative committees, and at Illinois Pollution Control Board ("Board") proceedings in the matter of groundwater quality standards, technology control regulations, cleanup regulations, regulated recharge areas, maximum setback zone, water well setback zone exceptions, clean construction and demolition debris, site specific coal ash impoundment closure and corrective action, and coal combustion waste impoundment regulations. Furthermore, I have served as primary Illinois EPA witness in enforcement matters.

Manager, Groundwater Section, DPWS, BOW, Illinois EPA. (9/92-Present) My primary responsibilities included development and implementation of Illinois statewide groundwater quality protection, USEPA approved WHPP, and source water protection program. The Groundwater Section worked with the United States Geological Survey ("USGS") to refine Illinois EPA's ambient groundwater monitoring network using a random stratified probability based design. The Groundwater Section continued to operate a statewide ambient groundwater monitoring program for the assessment of groundwater protection and restoration programs based on the new statistically-based design. I co-authored a Guidance Document for Conducting Groundwater Protection Needs Assessments with the Illinois State Water and Illinois State Geological Surveys. I also continued to conduct extensive coordination with federal, state and local stakeholders including the Governor appointed GAC, the ICCG, four Priority Groundwater Protection Planning Committees, Illinois Source Water Protection Technical and Citizens Advisory Committee, and at the national level as Co-chair of the GWPC Ground Water Division to develop and implement groundwater protection policy, plans, and programs. I also served periodically as Acting Manager for the Division of Public Water Supplies. Additionally, the Groundwater Section provided hydrogeologic technical assistance to the BOW Permit Section and Mine Pollution Control Program to implement source water protection, groundwater monitoring and aquifer evaluation and remediation programs. I continued to work on the development of legislation, rules and regulations. I also served as a primary Illinois EPA witness at Board proceedings in the matter of groundwater quality standards, technology control regulations, regulated recharge areas and water well setback zone exceptions. Furthermore, I served as an Agency witness in enforcement matters.

Acting Manager, Groundwater Section, DPWS, BOW, Illinois EPA. (7/91-9/92) My responsibilities included continued development and implementation of Illinois statewide groundwater quality protection, U.S. EPA approved WHPP, and ambient groundwater monitoring program. The Groundwater Section developed the Illinois EPA's WHPP pursuant to Section 1428 of the SDWA and was fully approved by U.S. EPA. Illinois EPA was the first state in U. S. EPA Region V to obtain this approval. I performed extensive coordination with state and local stakeholders including the Governor appointed GAC, the ICCG to develop and implement groundwater protection, plans, policy, and programs. Developed and implemented the establishment of Illinois' Priority Groundwater Protection Planning Committees. Developed and implemented Pilot Groundwater Protection Needs Assessments. The Groundwater Section also provided hydrogeologic technical assistance to the BOW Permit Section and Mine Pollution Control Program staff to develop groundwater monitoring and aquifer evaluation, remediation and/or groundwater management zone programs. I also served as a primary Agency witness at Board proceedings in the matter of groundwater quality standards and technology control regulations. Additionally, I served as an Agency total quality management ("TQM") facilitator, and TQM trainer.

Manager of the Hydrogeology Unit, Groundwater Section, DPWS, Illinois EPA (7/88-7/91) Managed a staff of geologists and geological engineers that applied hydrogeologic and groundwater modeling principals to statewide groundwater protection programs. Developed, and integrated the application of GIS, GPS, geostatistical, optimization, vadose zone, solute transport, groundwater flow and particle tracking computer hardware/software into groundwater protection and remediation projects. Conducted extensive coordination with state and local

stakeholders including the Governor appointed GAC and ICCG to develop and implement groundwater protection policy, plans, and programs. Developed and implemented a well site survey program to inventory potential sources of contamination adjacent to community water supply wells. Additionally, I worked on the development of rules to expand setback zones based on the lateral area of influence of community water supply wells. Furthermore, I provided administrative support to the Section manager in coordination, planning, and supervision of the groundwater program. I also assisted with the development of grant applications and subsequent management of approved projects. In addition, I assisted the section manager with regulatory and legislative development in relation to the statewide groundwater quality protection program. I also served on the Illinois EPA's Cleanup Objectives Team ("COT").

Environmental Protection Specialist I, II, and III, Groundwater Section, DPWS, Illinois EPA. (7/85-7/88) I was the lead worker and senior geologist in the development and implementation of Illinois statewide groundwater quality protection program. I worked on the development of Illinois EPA's ambient groundwater monitoring network, and field sampling methods and procedures with the USGS. I published the first state-wide scientific paper on volatile organic compound occurrence in community water supply wells in Illinois. In addition, I assisted with the development of A Plan for Protecting Illinois Groundwater, and the legislation that included the Illinois Groundwater Protection Act.

Consulting Well Site Geologist, Geological Exploration (GX) Consultants, Denver Colorado. (3/81-12/83) I worked as a consulting well site geologist in petroleum exploration and development for major and independent oil companies. I was responsible for the geologic oversight of test drilling for the determination and presence of petroleum hydrocarbons. Prepared geologic correlations and performed analysis of geophysical logs, drilling logs and drill cuttings. Supervised and analyzed geophysical logging. Made recommendations for conducting and assisted with the analysis of drill stem tests and coring operations. In addition, I provided daily telephone reports and final written geologic reports to clients.

Undergraduate Teaching Assistant, Geology Department, Illinois State University. (3/79-3/81) I was responsible for teaching and assisting with lecture sessions, lab sessions, assignment preparation and grading for Petrology, Stratigraphy and Geologic Field Technique courses.

II. Undergraduate Education

B.S Geology, 1981, Illinois State University ("ISU"). Classes included field geology at South Dakota School of Mines and Technology, and Marine Ecology Paleoecology at San Salvador Field Station, Bahamas

III. Post Graduate Education

Applied Hydrogeology, 1984, ISU Graduate Hydrogeology Program

Engineering Geology, 1984, ISU Graduate Hydrogeology Program

Geochemistry for Groundwater Systems, 1986, USGS National Training Center

Hydrogeology of Waste Disposal Sites, 1987, ISU Graduate Hydrogeology Program

Hydrogeology of Glacial Deposits in Illinois, 1995, ISU Graduate Hydrogeology Program

MODFLOW, MODPATH and MT3D groundwater modeling, 1992, USGS National Training Center

24 Hour Occupational Health & Safety Training, 1994

Computer Modeling of Groundwater Systems, 1995, ISU Graduate Hydrogeology Program

Introduction to Quality Systems Requirements and Basic Statistics, 2001, U.S. EPA

Source Water Contamination Prevention Measures, 2001, U.S.EPA, Drinking Water Academy

Fate and Transport Processes and Models, 2006, Risk Assessment and Management Group, Inc.,

National Response Framework (NRF) IS-800.b, 2012, EMI

National Response Plan (NRP), an Introduction IS-800.a, 2007, EMI

National Incident Management System (NIMS) an Introduction IS-00700, 2006, Emergency Management Institute (EMI),

Intermediate ICS for Expanding Incidents IS-00300, 2008, EMI

ICS for Single Resources and Initial Action Incidents IS-00200, 2006, EMI,

Introduction to the Incident Command System (ICS) IS-00100, 2006, EMI

IV. License

Licensed Professional Geologist 196-000553, State of Illinois, expires 3/31/2019

V. Certification

Certified Professional Geologist 7455, Certified by the American Institute of Professional Geologists 4/88

Certified Total Quality Management Facilitator, 5/92, Organizational Dynamics Inc.,

VI. Professional Representation

U.S. EPA Region V States representative on **GWPC Board of Directors** 2015

Chair of the *Interagency Coordinating Committee on Groundwater (ICCG)* 2013 to the present.

Illinois EPA liaison to the *Groundwater Advisory Council* (1988-present)

Senate Working Committee on Geologic Mapping.

Illinois EPA representative and subcommittee chairman, *State Certified Crop Advisory Board*, and *Ethics and Regulatory Subcommittee* established in association with the American Society of Agronomy/American Registry of Certified Professionals in Agronomy, Crops and Soils (1995 – 2001)

Illinois groundwater quality standards regulations technical work group (1988 – 1991).

ICCG State Pesticide Management Plan Subcommittee for the protection of groundwater.

Illinois EPA representative, State task group involved with developing the siting criteria for a low level radioactive waste site in Illinois.

Fresh Water Foundation's Groundwater Information System (GWIS) project in the great lakes basin.

Illinois EPA technical advisor, *four priority regional groundwater protection planning committees* designated by the Director to advocate groundwater protection programs at the local level (1991 – present)

Groundwater Subcommittee of the National Section 305(b) Report, of the Clean Water Act Consistency Workgroup.

Ground Water Protection Council's Wellhead Protection Subcommittee.

Co-Chair, *Groundwater Division of the GWPC* on (September 1997 to 2003)

Chairman, Illinois' Source Water Protection Technical and Citizens Advisory Committee.

United States Environmental Protection Agency National Ground Water Report Work Group. One of 10 state representatives serving on a work group sponsored by U.S. EPA headquarters charged with development of a national report to be submitted to the U.S. Congress on the status and needs for groundwater protection programs across the country. (January 1999 to July 2000)

Illinois EPA representative, *Northeastern Illinois Planning Commission Water Supply Task Force*. The purpose of this task force is to assist the Commission in the development of a Strategic Plan for Water Resource Management. (March 1999 to 2001)

GWPC/U.S. EPA Futures Forum Work Group providing input on source water protection for the next 25 years. (January 1999 to 2001)

GWPC/ASDWA work group providing input into the U.S. EPA Office of Ground and Drinking Water Strategic Plan for Source Water Protection. June 2000 to March 2005.

Co-Chair, U.S. EPA Headquarters/GWPC/ASDWA/ASWIPCA workgroup to develop the second Ground Water Report to Congress. March 2002 –present.

Chair, *ICCG Groundwater Contamination Response Subcommittee* responsible for developing a new strategy for responding to groundwater contamination and the subsequent notification of private well owners. March 2002 – April 2002.

Illinois EPA representative, *ICCG Water Quantity Planning Subcommittee* working on development of a surface and groundwater quantity- planning program for Illinois. June 2002 – January 2003

Chair, ICCG Right-to-Know (RTK) Subcommittee, 2006

GWPC, Groundwater Science and Research Advisory Board, 2007

Co-chair, Illinois Drought Response Task Force, 2012.

Peer Reviewer for research proposals to the Wisconsin Water Resources Institute. 2012- Present.

VII. Professional Affiliation

American Institute of Professional Geologists
Illinois Groundwater Association
Ground Water Protection Council
National Groundwater Association -Association of Groundwater Scientists and Engineers
Sigma Xi – The Scientific Research Society

VIII. Honors

Sigma Xi - Elected to Sigma Xi The Scientific Research Society for undergraduate research conducted and presented to the Illinois Academy of Science. 4/81

Director's Commendation Award - Participation in the development of the City of Pekin, Il. Groundwater Protection Program and commitment to the protection of Illinois groundwater. 7/95

Certificate of Appreciation - Outstanding contribution to the development of the Ground Water Guidelines for the National Water Quality Inventory 1996 Report to Congress from the United States Environmental Protection Agency Office of Ground Water and Drinking Water. 8/96

Groundwater Science Achievement Award - Illinois Groundwater Association for outstanding leadership and service in the application of groundwater science to groundwater protection in

Illinois and in the development of the wellhead protection program and pertinent land-use regulations. 11/97

Certificate of Appreciation - GWPC for distinguished service, remarkable dedication, valuable wisdom and outstanding contribution as a GWPC member, division co-chair and special committee member. 9/99

Drinking Water Hero Recognition - United States Environmental Protection Agency Administrator Carol Browner at the 25th Anniversary of the Federal Safe Drinking Water Act Futures Forum in Washington D.C. 12/99.

Certificate of Recognition - United States Environmental Protection Agency Region V Administrator Fred Lyons for outstanding achievements in protecting Illinois' groundwater resources. 12/99

Exemplary Systems in Government (ESIG) Award - Nomination by the Governor's Office of Technology from the Urban and Regional Information Systems Association (URISA) for the Illinois EPA's Source Water Assessment and Protection Internet Geographic Information System. 6/01

IX. Expert Witness Experience

IN THE MATTER OF: GROUNDWATER QUALITY STANDARDS (35 ILL. ADM. CODE 620), R89-14(B) (Rulemaking). Subject: I served as the principal witness recommending adoption of this Illinois EPA Agency proposal. R89-14(B) was adopted by the Board. The standards became effective January 1991.

STATE OIL COMPANY vs. DR. KRONE, McHENRY COUNTY and ILLINOIS EPA, PCB 90-102 (Water Well Exception). Subject: This case involved obtaining an exception from the owner of a non-community water supply well for placing new underground gasoline storage tanks within the 200-foot setback zone of well. I served as the principal witness for Illinois EPA on this case. The Board granted the exception with conditions.

People vs. AMOCO OIL COMPANY and MOBIL CORPORATION, Case no. 90-CH-79, Tenth Judicial Court, Tazewell County, Illinois. (Enforcement) Subject: Groundwater contamination resulting from releases at above ground bulk petroleum storage terminals resulting in violation of Illinois' Groundwater Quality Standards Regulations (35 Illinois Administrative Code 620). I served as the principal Illinois EPA witness on this case. The case was settled with a penalty of \$125,000 and the requirement of a comprehensive corrective action program.

IN THE MATTER OF: GROUNDWATER PROTECTION: REGULATIONS FOR EXISTING AND NEW ACTIVITIES WITHIN SETBACK ZONES AND REGULATED RECHARGE AREAS (35 ILL. ADM. CODE 601, 615, 616 and 617), R89-5 (Rulemaking). Subject: I served as the principal Illinois EPA witness supporting adoption of this Agency proposal. R89-5 was adopted by the Board and became effective January 1992.

HOUSE BILL 171 METHYL TERTIARY BUTYL ETHER (MTBE) ELIMINATION ACT, House Environmental and Energy Committee. (Legislation) Subject: This law required the phase out MTBE within 3 years of enactment. I served as a principal Illinois EPA witness in support of the proposed legislation. The legislation was adopted as Public Act 92-0132 on July 24 2001. PA 92-132 required the ban of MTBE within three years.

IN THE MATTER OF: GROUNDWATER QUALITY STANDARDS (35 ILL. ADM. CODE 620), R93-27 (Rulemaking). Subject: I served as the principal Illinois EPA witness recommending amendments of new constituent standards in this Agency proposal.

SHELL OIL COMPANY vs. COUNTY of DuPAGE and THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, PCB 94-25 (Water Well Setback Exception). Subject: A new underground gasoline storage tank was seeking an exception from the Illinois Pollution Control Board in relation to a private drinking water supply well setback zone. The DuPage County and the Illinois EPA held that the tank would be a significant hazard and opposed the exception. I served as the principal Illinois EPA witness. Shell withdrew the petition from the Board after hearings were held.

People ex rel. Ryan v. STONEHEDGE, INC., 288 Ill.App.3d 318, 223 Ill.Dec. 764, 680 N.E.2d 497 (Ill.App. 2 Dist. May 22, 1997). (Enforcement) Subject: The State brought Environmental Protection Act action against company engaged in business of spreading deicing salt, alleging that salt stored on company's industrial property leaked into area's groundwater supply, thereby contaminating it. The Circuit Court, McHenry County, James C. Franz, J., granted company's motion for summary judgment. State appealed. The Appellate Court, Colwell, J., held that: (1) wells existing before Illinois Water Well Construction Code was enacted are not "grandfathered" in as being in compliance with Code, so as to be automatically subject to testing for groundwater contamination, and (2) fact issues precluded summary judgment on claim arising from alleged deposit of at least 50,000 pounds of salt in pile within 200 feet of two existing water supply wells. Affirmed in part and reversed in part; cause remanded.

People vs. STONEHEDGE INC. Case no. 94-CH-46, Circuit Court of the 19th Judicial Circuit, McHenry County. (Enforcement) Subject: This case involved a violation of the potable well setback zone provisions of Section 14.2 of the Illinois Environmental Protection Act. Stonehedge Inc. placed a salt pile of greater than 50,000 pounds within the 200 foot setback of multiple private drinking water supply wells. I served as an Agency principal witness. Stonehedge Inc. was found to be guilty of violating the setback prohibition in this case and was assessed a penalty of \$1,500 and attorneys fees of \$4,500.

SALINE VALLEY CONSERVANCY DISTRICT vs. PEABODY COAL COMPANY, Case No. 99-4074-JLF, United States District Court for the Central District of Illinois. (Enforcement) Subject: Groundwater contamination from the disposal of 12.8 million tons of coarse coal refuse, slurry and gob. Witness for the Illinois EPA. This is an on-going case.

IN THE MATTER OF: PROPOSED REGULATED RECHARGE AREAS FOR PLEASANT VALLEY PUBLIC WATER DISTRICT, PROPOSED AMENDMENTS TO (35 ILL. ADM. CODE 617), R00-17 (Rulemaking). Subject: I served as the principal Illinois EPA witness

supporting adoption of this Agency proposal. The proposal was adopted on July 26, 2001 and became effective September 1, 2001.

IN THE MATTER OF: PROPOSED AMENDMENTS TO TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (35 Ill. Adm. Code 742), (R00-19(A) and R00-19(B)) (Rulemaking). Subject: I served as a supporting Illinois EPA witness recommending inclusion of MTBE in this Agency proposal.

IN THE MATTER OF: NATURAL GAS-FIRED, PEAK-LOAD ELECTRICAL GENERATION FACILITIES (PEAKER PLANTS), R01-10 (Informational Hearing) Subject: I served as a supporting Illinois EPA witness to discuss the impact of peaker plants on groundwater.

IN THE MATTER OF: GROUNDWATER QUALITY STANDARDS AND COMPLIANCE POINT AMENDMENTS (35 ILL. ADM. CODE 620), R01- 14 (Rulemaking). Subject: I served as the principal Illinois EPA witness recommending amendments of a groundwater standard for MTBE and compliance point determinations in this Agency proposal. The Board adopted the proposal unanimously on January 24, 2002.

TERESA LeCLERCQ; AL LeCLERCQ; JAN LeCLERCQ; WALT LeCLERCQ, individually; and on behalf of all persons similarly situated vs. THE LOCKFORMER COMPANY, a division of MET-COIL SYSTEMS CORPORATION, Case no. 00 C 7164, United States District Court, Northern District of Illinois. (Enforcement Subject: I was called as a witness by Lockformer Company to testify about a Well Site Survey prepared and published in 1989 by the Illinois EPA for Downers Grove community water supply.

TERESA LeCLERCQ; AL LeCLERCQ; JAN LeCLERCQ; WALT LeCLERCQ, individually; and on behalf of all persons similarly situated vs. THE LOCKFORMER COMPANY, a division of MET-COIL SYSTEMS CORPORATION, Case no. 00 C 7164, United States District Court, Northern District of Illinois. (Enforcement) Subject: I was called as a witness by Lockformer Company to testify about groundwater contamination in the Lisle and Downers Grove area.

HOUSE BILL 4177 PRIVATE WELL TESTING PROPERTY TRANSFER and DISCLOSURE ACT, House Environmental and Energy Committee. (Legislation) Subject: Legislation to require volatile organic chemical contamination testing of private wells at the time of property transfer and reporting to the Illinois Department of Public Health and the Illinois EPA. I served as a principal Illinois EPA witness in support of the proposed legislation. The legislation was not supported due to the opposition from the realtors association.

MATTER OF PEOPLE vs. PEABODY COAL, PCB 99-134 (Enforcement). Subject: the State of Illinois developed an amended complaint against Peabody Coal Company (PCC) for violation of the groundwater quality standard for total dissolved solids, chloride, iron, manganese, and sulfate. I developed testimony to address PCC's affirmative defense of challenging the basis for the groundwater quality standards for these contaminants.

IN THE MATTER OF: PROPOSED AMENDMENTS TO TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (35 Ill. Adm. Code 742) (TACO), (Rulemaking). Subject: I served as the Illinois EPA witness supporting amendments TACO to include wellhead protection areas. September 2004.

IN THE MATTER OF MAXMIUM SETBACK ZONES FOR MARQUETTE HEIGHTS
PUBLIC WATER SUPPLY (35 ILL. ADM. CODE 618), R05-09 (Rulemaking). Subject:
Pursuant to request by the Village of Marquette Heights the Illinois EPA developed a maximum setback zone for the Marquette Heights community water supply wells. I served as Illinois EPA's principal witness. The proposal was adopted on May 4, 2006.

IN THE MATTER OF: STANDARDS AND REQUIREMENTS FOR POTABLE WATER WELL SURVEYS AND FOR COMMUNITY RELATIONS ACTIVITIES PERFORMED IN CONJUNCTION WITH AGENCY NOTICES OF THREATS FROM CONTAMINATION UNDER P.A. 94-134 (35 Ill. Adm. Code 1505), R06-023 (Rulemaking), JANUARY 2006. I served as an Agency panel witness to support the adoption of the RTK regulation.

IN THE MATTER OF: PROCEDURES REQUIRED BY P. A. 94-849 FOR REPORTING RELEASES OF RADIONUCLIDES AT NUCLEAR POWER PLANTS: NEW 35 Ill. Adm. Code 1010, R07-20. (Rulemaking) I served as the Agency primary witness in this proceeding.

IN THE MATTER OF: GROUNDWATER QUALITY STANDARDS (35 ILL. ADM. CODE 620), R08-18 (Rulemaking). Subject: I served as the principal witness recommending amendments and updates to the exiting regulation. Thirty nine (39) new contaminant standards were added and wellhead protection areas were included under the compliance determination section. The Board went to First Notice on October 20, 2011. The Board adopted Second Notice on August 9, 2012. These amendments became final on October 4, 2013.

IN THE MATTER OF: IN THE MATTER OF: AMEREN ASH POND CLOSURE RULES (HUTSONVILLE POWER STATION): PROPOSED 35 ILL. ADM. CODE PART 840.101 THROUGH 840.144 (R09-21). (Rulemaking) Subject: I served as the one of principal witnesses on this site specific regulation. These regulatory amendments were adopted by the Board on January 20. 2011.

PEOPLE OF THE STATE OF ILLINOIS vs., EXELON CORPORATION (No. 06 MR 248), Will County Circuit Court. (Enforcement) Subject: I served as one of the primary Illinois EPA technical witnesses in a case where the State of Illinois and Will County sued Exelon for water pollution and exceeding groundwater standards beginning in 2001 at its Dresden Nuclear Generating Station near Morris. Exelon paid more than \$1 million to resolve three civil complaints stemming from radioactive tritium leaks at the Braidwood, Bryon and Dresden nuclear power plants.

IN THE MATTER OF MAXMIUM SETBACK ZONES FOR FAYETTE WATER COMPANY PUBLIC WATER SUPPLY (35 ILL. ADM. CODE 618), R011-25. (Rulemaking) Subject: Pursuant to request by the Fayette Water Company the Illinois EPA developed a maximum

setback zone for the Fayette Water Company community water supply wells. I am serving as Illinois EPA's principal witness. The adopted rule was published by the Secretary of State on March 16, 2012.

IN THE MATTER OF: Proposed Amendments To Clean Construction Or Demolition Debris Fill Operations (CCDD): Proposed Amendments To 35 Ill. Adm. Code 1100, R12-9. (Rulemaking) In response to Joint Committee on Administrative Rules recommendation; the Board agrees to open Subdocket B to consider groundwater monitoring August 23, 2012. I served as a panel witness to support the need for groundwater monitoring.

IN THE MATTER OF COMBUSTION WASTE (CCW) SURFACE IMPOUNMENTS AT POWER GENERATING FACILITIES: PROPOSED (35 ILL. ADM. CODE 841), R14-10 (Rulemaking) Subject: Illinois EPA proposed a rule of is of general culpability that covers all coal combustion waste surface impoundments and power generating facilities in the State of Illinois. The proposed rules included provisions for: groundwater monitoring, weekly inspection, annual reports, preventive response, corrective action, and closure. I am serving as Illinois EPA's panel witness. June 13, 2014

KENNETH SHAW, and MARY CROSBY vs. VILLAGE OF SAUK VILLAGE Case No. 13 L004048 in Circuit Court of Cook County. (Enforcement) Subject: I was called as a witness by the plaintiffs to testify about drinking water regulations and laws that apply to Sauk Village. October 28, 2014.

X. Publications Authored or Co-authored

Cobb, R.P., 1980. *Petrography of the Houx Limestone in Missouri*. Transactions of the Illinois Academy of Science Annual Conference, Illinois Wesleyan, Bloomington, IL.

A Plan for Protecting Illinois Groundwater, 1986, Illinois Environmental Protection Agency, January. 65 p.

Cobb, R.P., and Sinnott, C.L., 1987. Organic Contaminants in Illinois Groundwater.

Proceedings of the American Water Resources Association, Illinois Section, Annual Conference, Champaign, IL, April 28-29, p. 33-43.

Clarke, R.P., and Cobb, R.P., 1988. *Winnebago County Groundwater Study*. Illinois Environmental Protection Agency. 58 pp.

Groundwater in Illinois: A Threatened Resource, A Briefing Paper Regarding the Need for Groundwater Protection Legislation, April 1987, Governors Office and Illinois Environmental Protection Agency, 34 pp.

Clarke, R.P., Cobb, R.P. and C.L. Sinnott, 1988. A Primer Regarding Certain Provisions of the Illinois Groundwater Protection Act. Illinois Environmental Protection Agency. 48 pp. Cobb, R.P., etal, 1992. Pilot Groundwater Protection Needs Assessment for the City of Pekin. Illinois Environmental Protection Agency. 111 pp.

Cobb, R.P., 1994. Briefing Paper and Executive Summary on the Illinois Groundwater Protection Act and Groundwater Protection Programs with Recommendations from the Illinois Environmental Protection Agency Regarding the Siting of a Low Level Radioactive Waste Site. Presented to the Low Level Radioactive Waste Task Force on December 9, 1994 in Champaign-Urbana.

Cobb, R.P., 1994. *Measuring Groundwater Protection Program Success*. In the proceedings of a national conference on Protecting Ground Water: Promoting Understanding, Accepting

- Responsibility, and Taking Action. Sponsored by the Terrene Institute and the United States Environmental Protection Agency in Washington D.C., December 12-13, 1994.
- Cobb, R.P., Wehrman, H.A., and R.C. Berg, 1994. *Groundwater Protection Needs Assessment Guidance Document*. Illinois Environmental Protection Agency. +94 pp.
- Cobb, R.P., and Dulka, W.A., 1995. *Illinois Prevention Efforts: The Illinois Groundwater Protection Act Provides a Unified Prevention-Oriented Process to Protect Groundwater as a Natural and Public Resource*, The AQUIFER, Journal of the Groundwater Foundation, Volume 9, Number 4, March 1995. 3pp.
- Cobb, R.P., 1995. *Integration of Source Water Protection into a Targeted Watershed Program*. In the proceedings of the Ground Water Protection Council's Annual Ground Water Protection Forum in Kansas City Missouri.
- Dulka, W.A., and R.P. Cobb, 1995. *Grassroots Group Forges Groundwater Protection Law*. American Water Works Association, Opflow, Vol. 21 No. 3. 2pp.
- Cobb, R.P., 1996. *A Three Dimensional Watershed Approach: Illinois Source Water Protection Program*. In the proceedings of the Ground Water Protection Council's Annual Ground Water Protection Forum in Minneappolis Minnesota.
- Cobb, R.P., and W.A. Dulka, 1996. *Discussion Document on the Development of a Regulated Recharge Area for the Pleasant Valley Public Water District*. Illinois Environmental Protection Agency. pp 28.
- Cobb, R.P., 1996. *Illinois Source Water Protection Initiatives-Groundwater Perspective*. In the proceedings of the American Water Works Association's Annual Conference and Exposition in Toronto Canada. pp 585-594.
- Cobb, R.P., and Dulka, W.A., 1996. *Illinois Community Examines Aquifer Protection Measures*. American Water Works Association Journal. p10.
- Cobb, R.P., etal. October 1999, *Ground Water Report to Congress*, United States Environmental Protection Agency.
- Cobb, R.P., December 2001. *Using An Internet Geographic Information System (GIS) to Provide Public Access to Hydrologic Data*, Association of Groundwater Scientists and Engineers, National Groundwater Association, National Conference Proceedings, Nashville, Tennessee.
- Cobb, R.P., September 2001, *Regulated Recharge Area Proposal for the Pleasant Valley Public Water District*, Ground Water Protection Council Annual Forum Proceedings, Reno Nevada, 13 pp.
- Wilson, S., Cobb, R.P., and K. Runkle, January 2002. *Arsenic in Illinois Groundwater*. Illinois State Water Survey, Illinois Environmental Protection Agency, and Illinois Department of Public Health. http://www.epa.state.il.us/water/groundwater/publications/arsenic/index.html, 7 pp.
- R.P., Cobb, August 2002, *Development of Water Quantity Planning and Protection in Illinois A New Direction*, Proceedings of the Annual Ground Water Protection Council Technical Forum, San Francisco, California, 10pp.
- P.C. Mills, K.J. Halford, R.P. Cobb, and D.J. Yeskis, 2002. *Delineation of the Troy Bedrock Valley and evaluation of ground-water flow by particle tracking, Belvidere, Illinois*, U.S. Geological Survey Water-Resources Investigations Report 02-4062, 46 pp.
- Illinois Environmental Protection Agency's *Homeland Security Strategy*, March 2003, 20pp. Illinois Environmental Protection Agency' *Strategic Plan*, *Bureau of Water Section*, September 2003, pp.

Opinions and Conclusions of Richard Cobb for the Matter of People v. Peabody Coal, PCB 99-134 (Enforcement), May 23, 2003. 60 pp.

Cobb, R.P., Fuller, C., Neibergall, K., and M. Carson, February 2004. *Community Water Supply Well Shooting/Blasting near the Hillcrest Subdivision Lake County, Illinois Fact Sheet*. Illinois Environmental Protection Agency. 4 pp.

Cobb, R.P. and J. Konczyk, June 2011, *McCullom Lake Evaluation Report*, Illinois Environmental Protection Agency, 39 pp.,

http://www.epa.state.il.us/water/groundwater/publications/mccullom-lake-evaluation-rpt.pdf

Mills, P.C., and Cobb, R.P, 2015, Hexavalent and total chromium at low reporting concentrations in source-water aquifers and surface waters used for public supply in Illinois, 2013: U.S. Geological Survey Scientific Investigations Report 2015–5020, 58 p., http://dx.doi.org/10.3133/sir20155020.

Cobb, Richard P., June 2016., *Conceptual Hydrogeologic Model for 300 West LLC/Arnold*, Illinois Environmental Protection Agency for the Illinois Attorney General's Office, 120 pp. Cobb, Richard P., and Michelle Rousey, December 1, 2016, *Quality Assurance Project Plan: Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) Sampling at Freeport and Albany Community Water Supplies*, (IEPA BOW QAPP009-00-0916) Illinois Environmental Protection Agency, 54 pp.

XI. Additional Legislative Publications that I Participated in Developing

A Plan for Protecting Illinois Groundwater, Illinois Environmental Protection Agency, January 1986. 65 p.

Groundwater in Illinois: A Threatened Resource, A Briefing Paper Regarding the Need for Groundwater Protection Legislation, Governors Office and Illinois Environmental Protection Agency, April 1987. 34 pp.

Illinois Groundwater Protection Act, Public Act 85-0863, September 1987. 68 pp. Public Act 92-0132 (*MTBE Elimination Act*), July 24 2001.

Executive Order #5 - requires the ICCG to designate a subcommittee to develop an integrated groundwater and surface water resources agenda and assessment report. The report shall analyze the burden's on Illinois finite water resources, quantify Illinois' water resources, and prioritize an agenda to plan for the protection of these water resources. The Director of the Department of Natural Resources chaired this subcommittee. The ICCG and GAC shall use the subcommittee's agenda and report to establish a water-quantity planning procedure for the State. The Governor signed executive order #5 on Earth Day April 22, 2001.

Amendments to Sections 2, 3 and 4 of the Illinois Groundwater Protection Act 415 ILCS 55/2 to establish a Groundwater and Surface Water Quantity Protection Planning Program, January 2002, 3 pp. These amendments were never adopted due to opposition from the Illinois Farm Bureau.

Public Act 92 –652 (Senate Bill 2072)- Amends the Illinois Groundwater Protection Act to require the Environmental Protection Agency to notify the Department of Public Health, unless notification is already provided, of the discovery of any volatile organic compound in excess of the Board's Groundwater Quality Standards or the Safe Drinking Water Act maximum contaminant level. The Governor signed this into law as Public Act 29-652 (effective July 25, 2002).

House Bill 4177 - Amends the Illinois Groundwater Protection Act. Provides that before property that has a well used for drinking water on it can be sold, the owner must have the well

water tested for volatile organic chemical groundwater contaminants. Provides that if the well water does not meet the Illinois Pollution Control Board's Groundwater Quality Standards (35 II Adm Code Part 620), the owner shall notify the Illinois Department of Public Health (IDPH) and the prospective buyer of the property. The realtors association July 2002 opposed House Bill 4177.

House Resolution 1010 - The resolution drafted by in cooperation with Senator Patrick Dunn's staff urge the Illinois Environmental Protection Agency to further strengthen its public outreach efforts by developing, after negotiations with individuals representing areas affected by contamination and other relevant State agencies, a procedure to notify property owners whenever the Agency has confirmed an exceedence of applicable health and safety standards, using scientifically credible data and procedures under Illinois regulations. HR 1010 was adopted by voice vote on June 1, 2004.

Public Act 94-314 (Senate Bill 0214) – This is referred to as Right-to-Know (RTK) law. The law includes providing the Illinois EPA with administrative order authority (AO), information order authority, and established the requirements for providing notices to residents or business exposed or potentially exposed to contamination. The Illinois EPA had been seeking this type of AO authority for the past 35 years. Senate Bill 0214 was unanimously passed by both the Senate and the House May 2005. The legislation was signed into law by the Governor July 27, 2005. Public Act 94-849 (House Bill 1620) - Amends the Environmental Protection Act. Requires the owner or operator of a nuclear power plant to report to the Environmental Protection Agency any unpermitted release of a contaminant within 24 hours. The bill was signed by the Governor on June 12, 2006.

Public Act 96-0603 (Crestwood Bill) - Amends the Environmental Protection Act. This law requires the owners and operators of community water systems to maintain certain documents and to make those documents available to the Agency for inspection during normal business hours. Provides that the Agency shall provide public notice within 2 days after it refers a matter for enforcement under Section 43 or issues a seal order under subsection (a) of Section 34. Further, the bill provides that the Agency must provide notice to the owners and operators of the community water system within 5 days after taking one of these actions. Moreover, the bill requires that within 5 days after receiving that notice, the owner or operator of the community water system must send a copy of the notice to all residents and owners of premises connected to the community water system. In addition, indirect notification of institutional residents is provided. Requires the owner or operator of the community water system to provide the Agency with proof that the notices have been sent. Sets forth similar notice requirements that must be complied with when groundwater contamination poses a threat of exposure to the public above the Class I groundwater quality standards. The bill creates a civil penalty for violations of these notice requirements, and makes it a felony to make certain false, fictitious, or fraudulent statements. The bill passed both houses on May 30, 2009. The bill was sent to the Governor for signature on June 26, 2009, and was signed into law on August 24, 2009.

Public Act 096-1366 – Amends the Environmental Protection Act. This new law requires public water supplies to submit a corrective action plan to the Illinois EPA upon the Agency's issuing a right-to-know notice upon verifying that the finished public water has in fact exceeded 50% of the MCL for carcinogenic VOCs. Requires the response plan to include periodic sampling to measure and verify the effectiveness of the response plan, but also requires the Illinois EPA to take into account the technical feasibility and economic reasonableness of the response plane in

approving, modifying, or denying the response plan. Signed into law on July 28, 2010; effective July 28, 2010.

CERTIFICATE OF SERVICE

Joanne M. Olson, Assistant Counsel for the Illinois EPA, herein certifies that she has served a copy

of the foregoing NOTICE OF FILING, and PRE-FILED TESTIMONY OF RICHARD P. COBB,

<u>P.G.</u>, upon persons listed on the Service List, by placing a true copy in an envelope duly addressed

bearing proper first class postage in the United States mail at Springfield, Illinois on August 31,

2017, or by sending an email from my email account (joanne.olson@illinois.gov) to the email

addresses designated below with the following attached as a 26 page PDF document in an e-mail

transmission on or before 5:00 pm on August 31, 2017.

By:/s/Joanne M. Olson

THIS FILING IS SUBMITTED ELECTRONICALLY AND SERVED ON RECYCLED PAPER

2

SERVICE LIST

Office of the Attorney General 69 West Washington, St. Suite 1800 Chicago, IL 62706 mdunn@atg.state.il.us enviro@atg.state.il.us	Office of General Counsel Illinois Department of Natural Resources One Natural Resources Way Springfield, IL 62702-1271 gabe.grosboll@illinois.gov
Illinois Pollution Control Board 100 W. Randolph St. Suite 11-500 Chicago, IL 60601 Tim.Fox@Illinois.gov daniel.robertson@illinois.gov	Justin DeWitt, P.E. Chief of Gen. Engineering Illinois Department of Public Health 535 West Jefferson Springfield, IL 62761 justin.dewitt@illinois.gov