

CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

of the

COMMITTEE ON ENVIRONMENTAL PROTECTION

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October 27, 2009
Start: 1:20 pm
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HELD AT: Council Chambers
City Hall

B E F O R E: JAMES F. GENNARO
Chairperson

COUNCIL MEMBERS:
Mathieu Eugene
Peter F. Vallone, Jr.
G. Oliver Koppell
Bill de Blasio
Eric Ulrich

A P P E A R A N C E S (CONTINUED)

Paul Rush
Deputy Commissioner for Water Supply
DEP

Steven Schindler
Director of Water Quality
DEP

Dr. Olga Naidenko
Senior Scientist
Environmental Working Group

Joshua Gray
Natural Resources Defense Council

Fay Muir
President
Croton Watershed Clean Water Coalition

2 CHAIRPERSON GENNARO: [Off mic] Are
3 we ready to go? Okay, thank you, thank you.

4 Good afternoon and welcome, I'm
5 Councilman Jim Gennaro, Chair of the City
6 Council's Committee on Environmental Protection.

7 Today we're holding a hearing on
8 Intro 911 to amend the Administrative Code of the
9 City of New York in relation to testing by the
10 Department of Environmental Protection for the
11 presence of pharmaceuticals and personal care
12 products in the New York City drinking water
13 supply and the effluent from wastewater treatment
14 plants.

15 On March 10, 2008, the Associated
16 Press released a national investigative news story
17 on the presence of a wide range of pharmaceutical
18 drugs in our national drinking water supply.
19 Pharmaceutical drugs, although we all know what
20 pharmaceutical drugs are, here we'll go through
21 it, are chemicals used for diagnosis, treatment,
22 cure, mitigation, or prevention of disease, health
23 condition, or structure/function of the body and,
24 for the purposes of this hearing, includes
25 veterinary and illegal, dangerous drugs.

1
2 According to the article, tests
3 were conducted in the watersheds of 35 of the 62
4 major water suppliers from metropolitan areas in
5 the United States. Pharmaceutical products were
6 detected in 28 of those 35 watersheds. However,
7 officials in six of those 28 metropolitan areas
8 did not go on to test their drinking water
9 supplies for the presence of pharmaceuticals. At
10 that time, New York City was one of those six
11 metropolitan areas that did not test its drinking
12 water for the presence of pharmaceuticals, but we
13 know that has changed and we're going to be
14 hearing about that.

15 But we have learned that DEP went
16 on to test our drinking water for pharmaceutical
17 products, although we don't know what
18 pharmaceutical products are being tested for and
19 what the results of those tests may be, that's why
20 we're here today and we're happy that DEP is going
21 to share the results of their good work with us.

22 By contrast, California in 2005,
23 not only began testing drinking water for the
24 presence of pharmaceutical products, but began
25 treating its drinking water to remove traces of

1
2 pharmaceutical products. Without an appropriate
3 and legislatively authorized pharmaceutical
4 testing and treatment program, it is difficult to
5 know which pharmaceutical drugs may be present, in
6 what quantities, and whether any end users may be
7 affected.

8 After the AP story, at U.S. Senate
9 hearings, Environmental Protection Agency
10 Assistant Administrator for Water Benjamin
11 Grumbles testified that he sent letters to the
12 Directors of state environmental and health
13 agencies requesting their assistance in monitoring
14 for pharmaceuticals and personal care products in
15 the waste water, surface water, groundwater, or
16 tap water because this type of information can be
17 very useful to the EPA as it carries out its
18 Contaminant Candidate Listing process to identify
19 potential contaminants for unregulated contaminant
20 monitoring and/or drinking water regulation when
21 it revises effluence guidelines and when it
22 determines which contaminants are the highest
23 priorities for development of new or revised water
24 quality criteria. Since that initial request, DEP
25 has added several additional pharmaceutical

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2 products to the final Contaminant Candidate
3 Listing process, including the antibiotic
4 erythromycin, as well as multiple forms of
5 estrogenic hormones.

6 Being informed allows us to make
7 personal and make rational choices and Intro 911
8 by Council Member Baez, myself, and other Council
9 Members, is the first step towards keeping the
10 Council and the public informed about
11 pharmaceutical and personal care products that may
12 be present in our drinking water.

13 We did have a previous hearing on
14 this topic, as most folks know who follow the
15 issue recall, and I'm grateful that DEP has
16 commenced a pilot testing program. We're eager to
17 hear the results of that pilot, eager to talk
18 about Intro 911 and what role that may play in
19 helping the city meet the challenge of
20 pharmaceuticals in the water supply.

21 I want to thank the staff that made
22 this hearing possible: Committee to the Counsel
23 Samara Swanston, Policy Analyst Siobhan Watson, my
24 own Environment Analyst William Murray is here, we
25 have a new intern in our office, her name is Anna

1
2 Helmond [phonetic], thank you, Anna. She is
3 trying to categorize and catalogue all of the
4 environmental work that this Committee has done
5 over the last eight years, so that's a large
6 project to undertake--just gave myself a
7 compliment there, so I just snuck that in, you
8 know. And I'm happy to see Chris Boyd, the
9 architect of many of the early environmental
10 successes of this Committee, who served my office
11 and this Committee and this Council with great
12 distinction, it's a pleasure to see Chris here.

13 And we also want to give a special
14 shout out to Dr. Olga Naidenko, I believe I'm
15 saying that right, you came from Washington from
16 the Environmental Working Group, whose work we
17 relied very heavily on and I appreciate you for
18 being here today, and all the other good folks
19 from DEP and others who are here to talk about
20 this very important issue.

21 We have Council Members Vallone
22 from Queens, Koppell from the Bronx who are here,
23 grateful to have them with us here today.

24 And without further ado, I will ask
25 Counsel to the Committee to swear in the first

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2 panel. I'll thank DEP once again for being here,
3 and after you've been sworn in, you can state your
4 names for the record, do your presentation, and
5 proceed with your good testimony. Thanks very
6 much. Samara, please.

7 SAMARA SWANSTON: Can you please
8 raise your right hands. Do you swear or affirm to
9 tell the truth, the whole truth, and nothing but
10 the truth today?

11 PAUL RUSH: I do.

12 Good afternoon, Chairman Gennaro
13 and Members of the Committee. I am Paul Rush,
14 Deputy Commissioner for Water Supply at DEP. On
15 behalf of Acting Commissioner Steven Lawitts,
16 thank you for the opportunity to speak to the
17 Committee on Introduction 911 regarding the
18 testing for the presence of pharmaceuticals and
19 personal care products. I will use the shorthand
20 designation pharmaceuticals in my testimony. In
21 the New York City drinking water supply, I am
22 joined by Steven Schindler, Director of Water
23 Quality for DEP.

24 In previous testimony, I spoke
25 about how disconcerting it is to the public to

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2 learn that even minute amounts of foreign
3 substances have been found in drinking water
4 across the United States. The compounds in
5 question are present in amounts so small they're
6 barely detectable using the most advanced
7 scientific methods available. At such low levels,
8 the United States Environmental Protection Agency,
9 EPA, has affirmed that there are no known health
10 effects associated with the presence of trace
11 amounts of pharmaceuticals in the water supply.

12 To give you a sense of scale based
13 on the parts per trillion levels of pharmaceutical
14 compounds detected in some water supply systems
15 nationally, a person would have to drink one
16 million glasses of water to get the dose of even
17 one over-the-counter ibuprofen tablet or the
18 caffeine in one cup of coffee. Even at eight
19 glasses of water per day, this would take the
20 average person over 300 years to consume.

21 New York City tests its finished
22 tap water, which is the term we use for water that
23 is ready to be distributed for consumption, for
24 approximately 240 chemical constituents--well
25 above regulatory requirements. The city performs

2 approximately 1,000 tests daily, 35,000 monthly,
3 and 400,000 on an annual basis from up to 1,000
4 sampling locations throughout the city. Test
5 results are reported to our regulators and are
6 summarized in our annual report on the quality of
7 New York City's drinking water. The results of
8 this extensive testing program confirm that New
9 York City tap water meets the highest standards of
10 quality and purity and is among the best in the
11 world, and I want to discourage New Yorkers from
12 unnecessarily pursuing expensive and
13 environmentally less than desirable bottled
14 alternatives to the public drinking water supply.
15 Just as a point of fact, bottled water is not
16 subject to the same high level of regulatory
17 scrutiny as public water supplies.

18 When I complete my statement, I
19 will ask Steve Schindler to present to you what
20 DEP has been doing since I last appeared before
21 this Committee and place that work in context of
22 national efforts on the part of EPA, the
23 scientific and research communities, and water
24 utilities across the country.

25 Our preliminary results indicate

1
2 the presence of parts per trillion and less of a
3 few compounds of emerging interest from a
4 scientific and regulatory perspective. Going
5 forward, we need to complete the final round of
6 sampling, obtain a detailed [off mic] review of
7 the contract lab results, a continued interaction
8 between DEP and contract lab personnel to address
9 quality assurance and quality control issues, QAQC
10 issues, and additional scientific QA review before
11 publishing the complete results.

12 Our and others efforts are directed
13 at detecting the presence of compounds at
14 extremely low levels. On the national level,
15 detection is just the start of a long process of
16 evaluation on the road to potential regulation of
17 any one substance. As you know, EPA maintains an
18 active program called the Contaminant Candidate
19 List, CCL, to identify contaminants in public
20 drinking water that warrant more detailed study.
21 Though EPA considers hundreds of pharmaceuticals
22 and personal care products for inclusion on the
23 CCL, only a small number are included 'cause most
24 occur at levels far below the levels associated
25 with any human health effects.

2 In a four-year study of the health
3 relevance of trace pharmaceuticals using the
4 highest concentrations found and the most
5 conservative safety factors, Dr. Shane Snyder, the
6 Research and Development Project Manager for the
7 Southern Nevada Water Authority, reported in a
8 peer-reviewed paper on the subject that the
9 bottom-line conclusion is that the concentrations
10 of pharmaceuticals we studied are orders of
11 magnitude lower than would pose a public health
12 threat.

13 Currently, EPA has drinking water
14 regulations for more than 90 contaminants. The
15 listing of contaminants on the final CCL 3,
16 published in September 2009, is only one step
17 toward determining whether a compound warrants
18 regulation as a threat to the water supply. After
19 publishing the list, EPA must decide whether to
20 regulate at least five contaminants from the list,
21 called Regulatory Determinations. EPA uses the
22 CCL to prioritize research and data collection
23 efforts to inform the agency's decision on whether
24 to regulate a specific contaminant. The presence
25 of a compound in the CCL is not a determination

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2 that the compound is a credible threat or that it
3 should be regulated as such.

4 The final CCL 3 includes 104
5 chemicals or chemical groups and 12
6 microbiological contaminants. The list includes
7 chemicals used in commerce, pesticides, biological
8 toxins, disinfection byproducts, and waterborne
9 pathogens. The contaminants on the list are not
10 regulated by existing national primary drinking
11 water regulations, are known or anticipated to
12 occur in the public water systems, and may impact
13 public health. EPA evaluated approximately 7,500
14 chemicals and microbes for the final CCL 3.

15 Following CCL listing, as required
16 by the Safe Drinking Water Act, EPA then evaluates
17 the contaminants for suitability for regulation
18 according to three types of criteria: health
19 effects, occurrence, and analytical methods. In
20 other words, EPA must determine on the basis of
21 the data it gathers whether the contaminant can be
22 reasonably well detected, whether it occurs at
23 particular levels, and whether the levels at which
24 it occurs has health effects. If the contaminant
25 satisfies the criteria, EPA then, and only then,

1
2 will proceed to regulate it. It is important to
3 note that the CCL alone does not impose any
4 requirement on public water systems. Before
5 regulating a contaminant, EPA would, one, publish
6 a preliminary determination to regulate; two,
7 issue a final determination; three, publish a
8 proposed regulation; and four, issue a final
9 regulation. Once a regulation is promulgated,
10 public water systems typically have three years to
11 come into compliance with the new regulation.

12 In a comprehensive paper called,
13 The State of Knowledge of Endocrine Disruptors and
14 Pharmaceuticals in Drinking Water, published by
15 the Water Research Foundation with the authors of
16 Shane A. Snyder, Brett J. Vanderford of the
17 Southern Nevada Water Authority, and Jorg Drewes
18 and Eric Dickenson of the Colorado School of
19 Mines, Environmental Science and Engineering
20 Division, and Erin Snyder, Gretchen Bruce and
21 Richard Pleus of Intertox in Seattle, Washington,
22 summarize the issue in this way, and I quote,
23 "Strong concerns voiced by members of the public
24 and environmental groups have prompted proposals
25 to set analytical detection limits as regulatory

2 levels for the concentrations of pharmaceuticals
3 and EDCs in wastewater, recycled reuse water, and
4 drinking water. While regulations might provide
5 some level of comfort, this approach invites
6 criticism for several reasons.

7 First, analytical detection methods
8 are improving at such a rapid rate that they are
9 outpacing improvements in treatment technologies.
10 Even if analytical costs are not a consideration,
11 it is practically impossible to remove all EDCs
12 and PPCPs in water to levels below achievable
13 detection limits.

14 Second, analytical detection limits
15 have no relationship to health-based standards.
16 As analytical methods continue to improve, it is
17 likely that detection limits for EDCs and PPCPs
18 will frequently fall below levels that produce any
19 known biological effect.

20 Consequently, striving to achieve
21 complete removal will necessitate the use of
22 increasingly expensive treatment technologies with
23 no appreciable health benefit. Ideally, drinking
24 water and wastewater treatment goals should be set
25 for concentrations of contaminants that are safe

1
2 and can be achieved at reasonable cost."

3 While we are focusing on detection
4 of pharmaceuticals in the water, we are mindful
5 that it is also important folks on preventing
6 these pharmaceuticals from entering the water
7 supply by personal disposal. Subsequent to the
8 previous hearing, DEP prepared a notice that was
9 published by the Catskill Watershed Corporation in
10 a summer newsletter and in the Watershed
11 Agricultural Council's e-newsletter, both
12 published this past June. In that notice, DEP
13 advised residents to protect the quality of both
14 groundwater and surface water in the watershed by
15 following the guidelines recommended by the
16 federal government for the proper disposal of
17 expired and unused prescriptions and over-the-
18 counter medications, pets drugs, vitamins,
19 sunscreens, fragrances, and other personal care
20 products. These guidelines suggest the following:
21 one, take unused, unneeded, or expired
22 prescription drugs out of their original
23 containers and throw them in the trash; two, mix
24 prescription drugs with an undesirable substance,
25 like used coffee grounds or kitty litter, and then

1
2 put them in an impermeable, nondescript container,
3 such as empty cans or sealable bags, to further
4 ensure that the drugs aren't misused; and three,
5 flush prescription drugs down the toilet only if
6 the label or accompanying patient information
7 specifically instructs doing so.

8 With respect to nonhuman impacts, I
9 can report that studies have found that in some
10 areas pharmaceuticals found in wastewater
11 treatment plant effluent may affect the health of
12 fish and other aquatic organisms that live in
13 receiving waters. Hereto, the risk posed to
14 aquatic organisms are unknown, largely because the
15 concentrations of receiving waters are so low,
16 significantly lower than the concentrations
17 observed in treated wastewater effluence. While
18 the major concerns have been resistance to
19 antibiotics and disruption of aquatic endocrine
20 systems by natural and synthetic steroids, many
21 other pharmaceuticals have unknown consequences.
22 More research is needed to draw any conclusion
23 about ecological impacts of pharmaceuticals and
24 any role they may have in potential human health
25 effects. I'll say more about this when I discuss

1
2 the provisions of Intro 911.

3 In previous testimony, I reported
4 to you that one paper, Philips, et al., February
5 2005, based on New York state data suggests that
6 conventional wastewater treatment plant processes
7 are effective in removing significant amounts of
8 these compounds. It also found that more research
9 is required to more conclusively establish the
10 fate of pharmaceuticals, as they are subject to
11 different types of treatment. At this point, it
12 is far too early for DEP to make any predictions
13 about the long-term need for any particular
14 treatment technology as a response to the presence
15 of pharmaceuticals. After we conclude our pilot
16 and submit the published results for scientific
17 and peer review, we'll decide on our next steps.

18 I would now like to address some of
19 the provisions of Intro 911. As we read it, the
20 bill calls for testing for PPCPs without any
21 limitation or specification. The category PPCPs
22 is so large that the testing so costly that any
23 sampling program has to be focused on a feasible
24 and financially manageable list of representative
25 compounds.

1
2 Second, the phrase drinking water
3 treatment plant serving the city and the city's
4 watershed requires clarification. The only DEP-
5 operated drinking water treatment plants per se in
6 service in the watersheds are at Kensico Reservoir
7 and New Croton Reservoir. If the phrase is meant
8 to include Wastewater Treatment Plants, WWTPs, in
9 the city's watersheds, monitoring for
10 approximately 100 compounds at 14 in-city WWTPs
11 and at 106 upstate WWTPs in the watersheds will
12 cost a minimum of \$2.5 million for a round of
13 sampling.

14 The bill would require treatment of
15 the drinking water supply to remove a contaminant
16 listed on the CCL. As I testified earlier, the
17 CCL is a list of contaminants in drinking water
18 that EPA will evaluate in a multi-step process to
19 determine whether there is a need to regulate them
20 based on the risk of health effects, occurrence,
21 and analytic methods. EPA only decides to
22 regulate a very small number of the compounds
23 listed on the CCL. It would be irresponsible to
24 use of funds to remove a contaminant from the
25 water supply that may never be deemed in need of

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2 regulation. It also would be extremely difficult
3 to establish a threshold target concentration for
4 removal without detailed feasibility studies.

5 The provision on the aquatic life
6 criteria is premature. The aquatic life criteria
7 represent what used to be called the Ambient Water
8 Quality Criteria. These were non-enforceable
9 guidance published in 1985 and before to deal with
10 levels of contaminants that represent acute or
11 chronic risk to salt water and freshwater aquatic
12 organisms. The concept has been proposed to be
13 expanded to include more subtle effects due, for
14 example, to endocrine disruption. At this point
15 it remains only a proposal and it has not been
16 adopted by EPA.

17 We expect that the aquatic life
18 criteria will ultimately represent for receiving
19 waters where the CCL represents for drinking
20 water--a list of contaminants that require
21 research into their potential effects on health.

22 With regard to wastewater effluent
23 and the receiving waters into which they are
24 discharged, we know from work done by the Water
25 Research Foundation and the Water Environment

1
2 Research Foundation that pharmaceuticals are
3 present at the parts per trillion level. What EPA
4 and the scientific community are looking for is
5 the connection between the levels of exposure and
6 possible toxicity. Rather than invest in
7 expensive treatments that may be of questionable
8 value, we believe our actions going forward should
9 be informed by the developing science in this
10 area.

11 In closing, please be assured that
12 New York City has consistently been ahead of the
13 curve in watershed protection efforts. The City
14 continues to closely monitor and track all
15 research into this issue and will adopt and comply
16 with any future federal or state mandates.

17 In addition, through our
18 subscriptions to the Water Research Foundation and
19 the Water Environment Research Foundation, we have
20 supported approximately 57 research projects with
21 a total value of over \$16.5 million focused on
22 this critical issue. We plan to continue to
23 support research into this important issue. Our
24 water quality measures have always been consistent
25 with the state of the science research, and, as

2 more is known about this particular issue, we will
3 continue to modify our policies and infrastructure
4 accordingly.

5 That completes my statement. With
6 the Chairman's permission, I would like to ask
7 Steve Schindler to complete our testimony with a
8 presentation on DEP's pilot program?

9 CHAIRPERSON GENNARO: Sure. Thank
10 you, Mr. Rush, I'd be happy to have Mr. Schindler
11 do that.

12 But first I want to recognize that
13 we've been joined by Council Member Eugene and
14 Council Member de Blasio, happy to have them with
15 us here today. Oh, I already mentioned Oliver
16 Koppell.

17 MALE VOICE: Yeah, you did.

18 CHAIRPERSON GENNARO: But the
19 Counsel to the Committee wants Oliver mentioned
20 again, which I'm for that, I'm for that.

21 And so, please, Mr. Schindler,
22 please proceed.

23 STEVEN SCHINDLER: Thank you. Mr.
24 Chairman, Council Members, I thank you for the
25 opportunity to be here today to talk to you in a

1
2 little bit of detail about the monitoring program
3 that we've implemented for the Bureau of Water
4 Supply to test pharmaceuticals in our drinking
5 water. I do have a PowerPoint presentation
6 prepared, so if you'd turn your attention to
7 either one of the screens, I'm going to go through
8 about a dozen slides that will help outline this
9 for us.

10 By way of introduction, as you've
11 heard, pharmaceuticals can have many sources,
12 including sources from wastewater, runoff from
13 agricultural fields, urban runoff, air, and other
14 sources, so it it's a relatively broad issue, it
15 is not a new issue, pharmaceuticals have been
16 present in the environments as long as we've been
17 using pharmaceuticals. So it's not really a new
18 issue for us, but it's become important of late
19 due to the fact that the advances that have
20 occurred in the analytical capabilities have
21 allowed laboratories and other researchers to
22 detect these compounds down at parts per trillion
23 levels.

24 Most of the compounds that are
25 regulated for, set forth by the EPA, are set at

1 maximum contaminant limits of parts per billion.
2 Parts per trillion is actually a thousand times
3 lower than that, and just to put it in context and
4 perspective, if you think of a time, one part per
5 trillion is equal to one second of time in 31,000
6 years, so it's a very, very minute amount. We are
7 really not looking for a needle in a haystack,
8 we're looking for a needle in an Iowa cornfield, I
9 mean, that's a very, very low levels. And there
10 are only a few contract laboratories that really
11 have the ability to analyze for these compounds
12 with any confidence down to these very, very low
13 levels.
14

15 So our approach in coming up with a
16 program for New York City, we decided to use two
17 contract laboratories because really, as I said,
18 there's only a few laboratories that are doing
19 this and we wanted to be able to have confidence
20 in our data, so we contracted with two
21 laboratories. We perform quarterly sampling at
22 our source water locations and we started in
23 January of 2009, we just did our last round of
24 sampling in October. And, as I'm going to go into
25 a little bit of detail on, we thought it was very

1
2 important, because of the fact that we're
3 measuring at low levels and the possible risk of
4 contamination from other sources, that we really
5 implement a high degree of both field and
6 laboratory quality control.

7 We're analyzing 10 samples per
8 quarter from our three source water locations,
9 that includes the quality control samples that I'm
10 going to talk about. And we also asked the United
11 States Geological Survey, since they have many
12 years experience in this, to also collect samples
13 side-by-side with us so we would have another
14 source of information to better understand the
15 data that we're collecting.

16 So to outline our three source
17 water locations, we are looking at our Croton
18 Reservoir up in the Croton Watershed, it's at the
19 Croton Lake Gatehouse, that's the raw water that
20 enters in the Croton system. And then we are
21 looking at our two source water locations at
22 Kensico Reservoir, which are the source water
23 locations for the Catskill and the Delaware
24 system. We chose to sample, not in the
25 distribution system, but to sample at our source

1
2 water locations because this is water that is
3 indicative of what's being delivered to the
4 consumer, yet it's prior to any treatment, and we
5 know that treatment, such as chlorination, can
6 impact the ability to recover some of these
7 compounds. So, in order to get a real handle on
8 what's in our water supply, we felt it was better
9 to do the source water locations.

10 In terms of field quality control,
11 we're using what we call a Clean Hands, Dirty
12 Hands technique. These are two of my staff
13 actually at one of the sample locations taking one
14 of the samples for the study and they are wearing
15 the PPE, the facemasks and the gloves, not to
16 protect themselves from the environment, but it's
17 to protect the sample from them, because people
18 use pharmaceuticals, it's prevalent in the
19 environment, there's a high risk that samples can
20 get contaminated. So what we've done here is the
21 staff person on the left is our Clean Hands
22 person, and the staff person on our right is our
23 Dirty Hands person, and the Clean Hands person is
24 only allowed to touch the sample bottle and
25 actually does the sampling. Whereas, the Dirty

1
2 Hands person handles the outer pouch that the
3 sample goes into and handles any work that's
4 needed to be done at the site, such as recording
5 information in a logbook. And this is similar to
6 the concept that you see in the microchip
7 technology where you have to be very careful about
8 contamination.

9 This is a picture of our sample
10 collector actually taking a field blank. I'm
11 going to talk a little bit about what field blanks
12 are, but I wanted to point out that there's
13 special bottles that are needed for this type of
14 work. They're bottles that are prepared by the
15 laboratory with specialized cleaning procedures
16 and they're shipped to us for the sampling.

17 And finally, this is putting the
18 sample in the inner pouch, which then goes into an
19 outer pouch in preparation for shipment off to the
20 contract laboratory. And there's a little
21 indication of where the actual sample tap is in
22 the Croton Lake Gatehouse.

23 So it's part of our field quality
24 control to really control against contamination
25 and to make sure that the data that we are getting

1
2 out of this study are reflective of what's in the
3 water and not some other source, as I said, we
4 have strong field quality control. We're taking
5 10 samples per quarter, only three of them are
6 actually samples from the water supply. There is
7 also three duplicate samples, actually those are
8 taken from the water supply also, but it's to
9 compare and make sure that we don't have
10 contamination between one sample versus another,
11 we should be getting the same data from both the
12 sample and the sample duplicate, so that's a
13 tested precision.

14 We also are taking trip blanks,
15 field blanks, laboratory fortified matrix samples.
16 These are essentially pure water that's free of
17 contaminants that's either from the laboratory or
18 fortified with known amounts of compounds that
19 actually take the trip with the samples, are
20 exposed to the same environment that the samples
21 are, and that's really to check for any
22 contamination during the sampling process.

23 So after samples are taken, they're
24 sent off to the laboratory, and, of course, you're
25 going to have the same potential of contamination

1
2 by the staff that are analyzing the samples, so
3 you have to implement a pretty rigid quality
4 control program in the laboratory itself. The
5 contract laboratories that we use are running
6 blanks, which are essentially clean water to
7 verify that there's not laboratory contamination,
8 they're adding spikes, which is a known amount of
9 compound to make sure there's no interferences
10 with the sample matrix and the ability to detect
11 the compounds, they're doing duplicates for
12 precision. And then there is internal standards
13 and surrogate standards, which are other chemicals
14 are added to the samples to make sure that the
15 instruments are performing properly and that the
16 sample preparation steps are being performed
17 properly.

18 And this is actually a picture from
19 the contract laboratory that we are using. I had
20 the opportunity to go out to the lab to visit and
21 inspect their facility, I was very impressed.
22 They have two instruments that are dedicated to
23 this work and they have a research scientist who's
24 dedicated to this type of analysis who's always
25 looking at ways to improve the laboratory's

1
2 ability to detect these compounds and improve the
3 limits of detection--how low they can detect the
4 compounds.

5 In any projects such as this, you
6 do have quality control issues. We've had some
7 minor issues with our laboratories as we've gone
8 through the project and they've gained more
9 experience, both with our samples and with
10 improving the method. We see that the number of
11 problems they've had have actually decreased.
12 Laboratory A is our primary laboratory, Laboratory
13 B is our supplemental lab, and as you can see, in
14 both cases, the number of issues with quality
15 control has decreased as we've gone through this
16 project.

17 So just summarizing our program,
18 where we're at this point, we're very pleased with
19 it, we think it's been very successful. We have
20 good agreement between our duplicate samples,
21 we've had very few instances where we've had
22 contamination of our blanks, so that's an
23 indication that our method of Clean Hands versus
24 Dirty Hands is really working. It is fairly
25 labor-intensive and does require a fair amount of

1
2 care to make sure it's done properly, but we think
3 that's definitely worth it. There's been other
4 studies that have been done where some of the data
5 may be questionable because of sources of
6 contamination, so we're pretty comfortable that
7 our program's working well in that regard.

8 We're also seeing relatively good
9 agreement between the two laboratories that we're
10 using, so that's an indication that will allow us
11 to really have confidence in the data.

12 And lastly, like any scientific
13 process, we need to really complete the process of
14 looking at all of the data and all of the quality
15 control data that go along with the samples to
16 ensure that we're interpreting the data correctly
17 before we actually publish the final results. So
18 we are waiting for the results from our fourth-
19 quarter sampling and, once we receive those, we're
20 going to be beginning that process of scientific
21 and peer review before we publish.

22 That concludes my presentation.

23 We'd be happy to answer any questions.

24 CHAIRPERSON GENNARO: Thank you.

25 Thank you, Mr. Schindler, and thank you,

1
2 Commissioner Rush. And when do you think we might
3 be able to see the results from the pile, that's,
4 of course, something that we would be eager to
5 find out what the results are, and what other
6 entities these results would be shared with. I
7 know that there are people doing different kinds
8 of testing programs and protocols throughout the
9 country and there is quite interest in this among
10 all the cities that are doing it, and the EPA is
11 asking people what they're doing, and the USGS is
12 involved and there's this output of information.
13 So I guess the first part of the question is, when
14 would this body hear about the results of the
15 test, and what plans does DEP have to share its
16 information with other entities that are eager to
17 get more information about this growing area of
18 scientific inquiry?

19 PAUL RUSH: We made it very clear
20 the last time we were here how important this
21 information is to the City and getting it done as
22 quickly as possible and we want to make sure when
23 we share that information that it's information we
24 can stand behind as correct, true information so
25 people can have confidence in the water that's

1 delivered. We want to share it as quickly as
2 possible with the Committee and with others. I
3 mean, our goal is to be able to present
4 information by January, ensure it by January, we
5 think, unless there's something that comes out of
6 this fourth round as very unusual, we hope by the
7 end of January we should be able to share that
8 information.
9

10 CHAIRPERSON GENNARO: And that
11 would be not only with us, but with what other
12 entities? Like the USGS, the EPA, the state
13 health department, or like who would be and is
14 there a formal mechanism for doing it? 'Cause it
15 seems that EPA has really reached out to folks
16 wanting to know what they're doing, what they're
17 testing for, what they're looking for, so how
18 would all of that work?

19 PAUL RUSH: We have briefed state
20 health, city health, and EPA is aware of the
21 program we're conducting right now, and we will
22 certainly share that information with them, as
23 well as with USGS, who's been conducting samples
24 in parallel with us at this part of this program.

25 CHAIRPERSON GENNARO: So they're

1
2 sampling at the same locations, looking for the
3 same things, is that what USGS is doing?

4 STEVEN SCHINDLER: We asked the
5 USGS to sample with us at the same locations at
6 the same time, side-by-side, so they're pulling
7 samples along with our staff, using the techniques
8 that they use normally for their programs that
9 they do. They're analyzing for--

10 CHAIRPERSON GENNARO: [Interposing]
11 They have their own analytical capabilities, their
12 own sort of like in-house labs that would do this,
13 do they have that kind of--

14 STEVEN SCHINDLER: Yes.

15 CHAIRPERSON GENNARO: --capability?
16 Okay.

17 STEVEN SCHINDLER: Yes, they have
18 their own laboratory that they've used for the
19 research that they've been doing for quite some
20 time, so we wanted to compare what we're doing
21 with what they're doing.

22 With regards to the question of the
23 chemicals, there are some chemicals that we're
24 doing that they're doing and there are some that
25 are going to be different. So I don't have the

1 full list of chemicals at my fingertips that
2 they're doing, but there will be some chemicals
3 that we'll be able to share and we'll be able--

4 CHAIRPERSON GENNARO: Right.

5 STEVEN SCHINDLER: --compare.

6 CHAIRPERSON GENNARO: But would it
7 be fair to say that we are testing for things that
8 they are not testing for, and they are testing for
9 things that we're not testing for; or is our
10 testing protocol like just a subset of what
11 they're doing and their testing list of chemicals
12 is more comprehensive than ours? How does the
13 comparison work?
14

15 STEVEN SCHINDLER: I'm going to
16 have to get back to you with the specific
17 information, but I believe that they are testing
18 for all of the chemicals that we're testing for--

19 CHAIRPERSON GENNARO: [Interposing]
20 Plus others.

21 STEVEN SCHINDLER: --plus there's
22 others that they have been doing as part of their
23 routine research. The list of chemicals that we
24 came up with was selected based on other studies
25 that had been done within our watershed and other

1 studies that had been done on a national level.
2 But the methods are always improving or being
3 developed, so the USGS has been adding chemicals
4 on a regular basis to their suite of things that
5 they do.
6

7 CHAIRPERSON GENNARO: Right, and
8 for [off mic] but how many substances are we
9 looking for in our testing protocol? How many
10 substances are we looking for?

11 STEVEN SCHINDLER: We're testing
12 for approximately 90 different substances as part
13 of this--

14 [Crosstalk]

15 CHAIRPERSON GENNARO: [Interposing]
16 Ninety, nine--

17 STEVEN SCHINDLER: Ninety.

18 CHAIRPERSON GENNARO: --yeah. And
19 do we have a sense of how many substances the USGS
20 is testing for?

21 STEVEN SCHINDLER: It's probably
22 slightly more than that, we would have to get back
23 to you with the specific--

24 CHAIRPERSON GENNARO: Right.

25 STEVEN SCHINDLER: --information.

2 CHAIRPERSON GENNARO: Do you have
3 any insight on the types of substances that they
4 would have that are not currently part of our
5 protocol?

6 PAUL RUSH: That USGS is testing--

7 CHAIRPERSON GENNARO: Yeah, yeah.

8 PAUL RUSH: --we don't have that
9 information today, Mr. Chairman, we will gather
10 that and we can get that to the Committee.

11 CHAIRPERSON GENNARO: Now, of
12 course, our reason for getting involved in the
13 first place was all of the release of information
14 the AP story, there's all kinds of--there was a
15 study that was done and, in response to this
16 phenomenon, most of those watersheds that were
17 shown to have pharmaceuticals and similar products
18 in the water supply commence some kind of testing
19 regimen and do we have any insight on what some of
20 these--on the jurisdictions like Philadelphia are
21 testing for and how they're testing for it and
22 where they are in the process of what they're
23 doing? It's a, I guess, quite a New
24 York/Philadelphia story these days and we want to
25 make sure we keep up with Philadelphia in all ways

1 possible, and so do we have any insight into what
2 they're doing though, them and other jurisdictions
3 that have done this? I mean, is there, for
4 example, collaboration between what we're doing
5 and some of these other major suppliers and what
6 they're doing and who they're doing it with and
7 how it's going and that kind of thing?

8
9 PAUL RUSH: On this issue, Mr.
10 Chairman, we have improved our coordination
11 collaboration and understanding what's going on
12 with other utilities, including Philadelphia where
13 we've had conversations with them, they have a
14 program of monitoring in place. We're also
15 participating in the research that's going on
16 through the Water Research Foundation on
17 understanding this issue and Dr. David Lifski
18 [phonetic] from our staff is a member of an
19 advisory committee on one of the research specific
20 topics on this--

21 [Crosstalk]

22 CHAIRPERSON GENNARO: [Interposing]
23 Just hang on one second, if I could ask the
24 Sergeant to close the door outside, we're getting
25 some chit-chat wandering in here. We don't want

1
2 any of our chit-chat to get out either, this is
3 important stuff.

4 PAUL RUSH: In understanding what
5 other utilities are doing, what makes the most
6 sense scientifically, we're committed to improving
7 that understanding. Philadelphia was doing
8 testing before we were doing testing, we were not
9 involved in some of the earlier research in this
10 issue.

11 In terms of being involved in the
12 earlier research, you can look back and say maybe
13 we should have been involved in that research, but
14 what's important to us is that this is drinking
15 water, the people of New York City rely on it,
16 people have to have confidence in that, and the
17 more we understand about the water and what's in
18 the water, I think improves the confidence
19 consumers can have in us as an agency and the city
20 in terms of delivering a product that they can
21 rely on and feel comfortable about.

22 CHAIRPERSON GENNARO: Certainly
23 that makes sense. Now with regard to Intro 911,
24 of course, that was our natural response as a
25 legislative committee, issue comes up, what do

1
2 legislative committees do, they legislate, you
3 know? You go to a surgeon and you indicate to him
4 or her that you have a problem, like don't be
5 surprised if he or she says surgery. And so
6 that's what we do here, and sometimes it's very
7 helpful to crystallize the City's focus on a
8 particular challenge through a legislative
9 instrument that makes people really focus on what
10 we're going to be doing as far as the testing, as
11 a whole rulemaking thing. And we can do this, I
12 think, in such a way that it's common sense, it's
13 practical, it's evolving, and it would allow for
14 changes in technologies. Like we're smart enough,
15 this Council and the Bloomberg Administration, to
16 create a legislative instrument that will serve
17 New Yorkers well and have to be carried out by
18 future Councils and future Administrations that
19 may or may not have the same dedication to public
20 health as does the Bloomberg Administration and
21 this Council, you see where I'm going here. And
22 that it would be great to figure out a way to do a
23 bill that would certainly not require the
24 Administration that is DEP to do things that
25 didn't make any economic sense, but it would be

1
2 something that would demonstrate in a very formal
3 way city government's overall commitment, your
4 branch and our branch of government to making sure
5 that, as a baseline, we do such things and that
6 we're participating in the national dialogue on
7 this issue.

8 And I can certainly appreciate some
9 of the comments that were made regarding Intro
10 911, certain elements that would have to be
11 defined a little better, certain elements that can
12 be rewritten so that they were more practical,
13 whatever, and that's what the legislative process
14 is about. But we would be inclined to work with
15 the Administration in a very cooperative way to
16 come up with a piece of legislation that we both
17 liked and thought was prudent and that would serve
18 well successive administrations and councils and
19 would be there to guide our folks to make sure
20 that this always got the priority that it really
21 deserves. Because once you look at some of the
22 science that was put forward in the excellent
23 briefing paper that was developed by the staff,
24 and I want to thank the staff for that, some of
25 the folks who are coming forward about the effects

1
2 of these substances on fish and other species,
3 pretty, if I can use a technical term, pretty
4 funky stuff that has happened to some of these
5 creatures, it certainly gives us pause and we want
6 to make sure that we're doing whatever we can.

7 And what would be, do you think,
8 the Administration's disposition towards working
9 with the Council to come up with a bill that we
10 would work on collaboratively to make sure that
11 was prudent and not over the top, but would really
12 set a standard for this area of endeavor? Do you
13 believe that there is receptivity in the
14 Administration for working with us to craft such a
15 bill?

16 PAUL RUSH: Chairman Gennaro,
17 you've always been on the forefront in terms of
18 protecting the City's water supply throughout the
19 years you've been here, which we certainly
20 appreciate and we'd be more than willing to work
21 together with the Committee in terms of developing
22 a bill that would meet the needs in a way that
23 would be conducive to protecting the water supply.

24 CHAIRPERSON GENNARO: Well that is
25 very good to hear, we would like working with DEP

1
2 on these things. And you mentioned some of the
3 technical difficulties of testing various effluent
4 from all the water treatment plants, I guess
5 however many there are in the watersheds, and
6 whether that would be feasible, practical, whether
7 that's even the place to do it, how much it would
8 cost to do it there. But we're not the
9 penultimate experts in coming up with the perfect
10 bill and that's why we would really need the full
11 cooperation of the Administration to put together
12 something that made a lot of sense and would be of
13 help, not only to this jurisdiction, but to other
14 water supply systems around the country who are
15 looking at this and they can say, oh, look at what
16 New York City has done, they did something that
17 makes sense and their situation is similar to our
18 situation and maybe we could do something like
19 that. And it wouldn't be the first time that the
20 good work of DEP and the City Council and the City
21 government of New York was replicated for the
22 benefit of other jurisdictions.

23 So thank you for that little
24 handshake here, it looks like we have a deal.

25 And let me see if I have further

1
2 questions for you on this. Staff submitted some
3 of their own thoughts, I want to make sure that I
4 cover the bases. [Pause] Okay, my legal counsel,
5 who's very wise, has said that--I can paraphrase
6 here, that you've sold the product, Mr. Chairman,
7 and like once you've sold the product, you don't
8 continue to keep selling it. I worked in my
9 father's jewelry store once upon a time and once
10 you get the customer to say like, I'll take it,
11 then he said you just immediately like change the
12 topic on how's the weather, how's this, how's
13 that, or whatever. Once you've sold something,
14 don't continue to sell it because you may get the
15 buyer to change their minds or whatever.

16 And so [off mic] the following, let
17 me thank you for the good efforts that you put
18 forward since our last hearing on this. You
19 didn't just come here and listen to us, you went
20 out, you did this whole program, you're working
21 with the best labs in the country, you're talking
22 to other jurisdictions that are grappling with
23 this evolving field, you made a commitment to work
24 with us to come forward to ultimately craft a
25 prudent bill that will do the needful, and hard to

1 ask for more than that.

2
3 And so I wish you well in your
4 efforts and we look forward to getting the results
5 of the study when it makes sense to make them
6 available, and we'll work together to take on this
7 issue and many other issues that are facing the
8 water supply.

9 Even though this hearing is not
10 about gas drilling, I will thank you, Commissioner
11 Rush, for your efforts to put together that final
12 work product that you brought before the Committee
13 two business days ago, and so you're getting some
14 frequent flyer miles from the Committee that are
15 redeemable for nothing, but we certainly thank you
16 and we look forward to working with you. With
17 that said, appreciate you being here very much and
18 we'll work together to get this to happen.

19 PAUL RUSH: Thank you very much.

20 CHAIRPERSON GENNARO: You bet.

21 Okay, thank you. [Pause] This is doctor, right?

22 FEMALE VOICE: Mm-hmm.

23 CHAIRPERSON GENNARO: Okay. Dr.
24 Olga Naidenko of the Environmental Working Group,
25 we made reference to your work and your efforts,

2 and we appreciate you being here. Coming all the
3 way up from Washington. You can give your
4 statement to the Sergeant.

5 [Off mic]

6 CHAIRPERSON GENNARO: Okay, Doctor,
7 thank you very much for being with us today. My
8 staff speaks glowingly of your efforts on this
9 issue, we certainly appreciate that. We'll have
10 the Counsel to the Committee swear you in, maybe
11 state your name for the record, and proceed with
12 your testimony.

13 DR. OLGA NAIDENKO: Thank you--

14 [Crosstalk]

15 SAMARA SWANSTON: Please raise your
16 right hand.

17 DR. OLGA NAIDENKO: Oh, yes.

18 SAMARA SWANSTON: Do you swear or
19 affirm to tell the truth, the whole truth, and
20 nothing but the truth today?

21 DR. OLGA NAIDENKO: Yes, I do.

22 CHAIRPERSON GENNARO: Thank you,
23 thank you, Doctor.

24 DR. OLGA NAIDENKO: Thank you, Mr.
25 Chairman. My name is Olga Naidenko and I am a

2 senior scientist at the Environmental Working
3 Group, a non-profit research and advocacy
4 organization in Washington, D.C. Environmental
5 Working Group maintains a national tap water
6 quality database where people can find what urban,
7 industrial, or agricultural pollutants may be
8 present in their drinking water. EWG is actually
9 involved in research and policy work on tap water
10 quality and protection of drinking water sources.

11 Thank you for the opportunity to
12 testify at today's hearing. With this testimony,
13 we express our strong support for the proposed law
14 that would require testing for pharmaceuticals and
15 personal care product chemicals in the New York
16 City drinking water supply. I will address three
17 key points and details for those points are in my
18 written testimony submitted for the record.

19 First, the full spectrum of
20 pharmaceuticals and related contaminants in the
21 New York City drinking water supply is currently
22 unknown. This gap must be urgently remedied by
23 annual water quality monitoring. As we already
24 heard today, government agencies, news media, and
25 the general public are very concerned about the

1
2 presence of human and veterinary medicines in
3 drinking water. Often we hear statements that no
4 individual pharmaceutical is present at the
5 medically [off mic] dose. This is probably true,
6 but we also know that drug interactions can pose
7 special health dangers [off mic] in cases in the
8 hospital and we also know that some [off mic]
9 substances can act at very low dose, so we
10 definitely can not dismiss the risks about the
11 presence of pharmaceuticals in water.

12 The first step to tackle this
13 challenges is to find out what pharmaceuticals may
14 be actually found in the New York City drinking
15 water supply. With this law, the City will be
16 able to devise a science-based policy by
17 collecting real data and developing the necessary
18 information for any mitigation steps that may be
19 needed to avoid the risks to people and the
20 environment.

21 My second point, the results of the
22 testing must be fully disclosed in order to
23 maintain the public's confidence in the health and
24 safety of the drinking water. We all know that
25 members of the public will not want to wake up in

1
2 the morning and read about anti-convulsive
3 medications in their tap water--that definitely
4 does not help the public confidence. And
5 importantly, drinking water utilities are very
6 supportive of this disclosure. For example, last
7 year, in response to the AP story, the Association
8 of Metropolitan Water Agencies and Organization of
9 Drinking Water Supplies made the following
10 statement: "Water utilities should take steps to
11 keep their consumers informed of their efforts to
12 monitor and remove pharmaceuticals from water
13 sources. Just as water utilities need data to
14 make informed decisions, we believe that consumers
15 should have the information they need to make
16 personal health decisions."

17 EWG strongly supports the provision
18 of the proposed law that would require the
19 submission of an annual report on the results of
20 water quality testing. We also urge the City to
21 make this data publicly available, for example,
22 via the Department of Environmental Protection
23 website. This degree of transparency is
24 absolutely essential in order to maintain public
25 confidence in tap water.

1
2 And third and final point, we need
3 a [off mic] robust dataset on the occurrence of
4 pharmaceutical contaminants so that we can develop
5 appropriate economically feasible plans for the
6 protection of drinking water, as well as for the
7 survival and thriving of aquatic life.

8 As we heard today, certainly there
9 are costs for conducting this test. It is very
10 possible that some additional treatment systems
11 may be necessary to install, but the data that
12 will be collected under the proposed law will
13 actually allow the City to save money by focusing
14 on the highest priority, we need to know what's
15 out there so that they can treat for those
16 specific contaminants. So we need to know what
17 pharmaceuticals are found, which ones pose the
18 greatest health risks, where they are primarily
19 released, and what treatments will be most
20 effective to tackle the kinds of pollutants which
21 affect the New York City drinking water supply.

22 We also fully agree with the
23 provision of the law that focuses on protection of
24 aquatic life. In the recently published study,
25 EPA researchers reported that pharmaceuticals and

1
2 personal care product chemicals accumulate in
3 fish. We are concerned that there may be human
4 health outcomes of cumulative exposure to
5 pharmaceuticals, both for forms of waters that
6 people drink, as well as for fish, especially for
7 people who are active in recreational fishing,
8 which is a common pastime for many people who live
9 in New York City and nearby communities. And we
10 all have heard stories about contaminants such as
11 PCBs, that they accumulate in water, then in fish,
12 and people basically get accumulative exposure.

13 We know that aquatic species often
14 serve as sentinels for human health, so if we want
15 to forestall any potential human health problems
16 due to these pharmaceuticals, we need to ensure
17 that these contaminants would not pose an adverse
18 impact on aquatic ecosystems.

19 We fully understand that this is a
20 very complex problem, that [off mic]
21 pharmaceuticals in the nation's waters needs a
22 comprehensive response by policy makers, drinking
23 water and wastewater utilities, scientists,
24 individual citizens, as well as, very importantly,
25 pharmaceutical industry. And right now

2 pharmaceutical industry basically gets a free
3 pass, they are not responsible for the end of life
4 fate of their product and this is bad, but this a
5 problem that will need to be tackled on the
6 federal level.

7 We also are very supportive of the
8 programs that aim to capture as much pollution as
9 possible at the source, for example, places such
10 as hospitals.

11 We commend the Council for
12 considering this important measure that will
13 protect public health from potential adverse
14 effects of lifelong cumulative exposure to
15 mixtures of multiple pharmaceuticals and endocrine
16 disrupting chemicals in drinking water and our
17 children will certainly thank us for doing this
18 right now to protect the health of future
19 generations.

20 Thank you for the opportunity to
21 testify. Environmental Working Group will be very
22 happy to work with the Council in any way we can
23 to help you advance this important law.

24 CHAIRPERSON GENNARO: Thank you,
25 thank you, Doctor, thank you so much, and also the

2 Environmental Working Group for putting so much
3 effort into this, and you're doing a great service
4 for the entire country for being real leaders on
5 this issue. And certainly I know that I can count
6 on the Environmental Working Group to help us as
7 we try to craft a bill that is the best bill that
8 we can get here in New York City. Do I have your
9 commitment to help us in doing that?

10 DR. OLGA NAIDENKO: Absolutely so,
11 as we already heard today, it's like which list do
12 we use, which contaminants we go after. We fully
13 understand that we need to consider costs and the
14 [off mic] of best available science and we stand
15 ready to help in any capacity we can.

16 CHAIRPERSON GENNARO: Thank you,
17 thank you. And also is this something you're
18 doing with other jurisdictions? You're involved
19 in their efforts to try to tackle this--oh, I'm
20 sorry, I'm sorry, I want to recognize Council
21 Member Ulrich from Queens, I didn't see him come
22 in, but a valued member of this Committee, thank
23 you very much for being here, Eric.

24 And are you working with other
25 jurisdictions that are trying to tackle this

2 problem or just trying to do consciousness raising
3 among other jurisdictions that they should be
4 doing something on this? Like, what do you
5 reference around the country? Like what do they
6 consist of?

7 DR. OLGA NAIDENKO: We are not
8 working with other jurisdictions right now on
9 specific issue of pharmaceuticals in drinking
10 water. As we all understand, this is an emergent
11 problem so our tap water quality database has
12 looked at familiar entities--industrial
13 pollutants, agriculture pollutants--and we have
14 worked a lot with water utilities looking at these
15 issues, basically the contaminants that are known
16 and are tested for. We are only now merging into
17 this field of contaminants that we know are out
18 there, but are not as yet extensively tested.

19 CHAIRPERSON GENNARO: Well I'm very
20 grateful that you're doing everything that you are
21 doing and I thank you for coming here today and
22 presenting this comprehensive testimony and it
23 will be a great resource for us. All of the
24 studies that you cite in your statement are very
25 helpful and these are very critical references for

2 us as we try to tackle this issue. Doctor, thank
3 you very much for being here today, I'm very, very
4 grateful to have you. Thank you so much.

5 DR. NAIDENKO: Thank you very much,
6 Chairman.

7 CHAIRPERSON GENNARO: Okay, you
8 bet. Next witness, Joshua Gray from the Natural
9 Resources Defense Council.

10 Mr. Gray, thank you for being here
11 today, I have your statement. Samara will--

12 SAMARA SWANSTON: [Interposing] Can
13 you please raise your right hand?

14 CHAIRPERSON GENNARO: --get you
15 situated.

16 SAMARA SWANSTON: Do you swear or
17 affirm to tell the truth, the whole truth, and
18 nothing but the truth today?

19 JOSHUA GRAY: Yes, I do.

20 CHAIRPERSON GENNARO: Okay. Thank
21 you, thank you, Mr. Gray, pleasure to have you
22 here today. Thank you for NRDC's commitment to
23 this issue, as they are committed to so many
24 issues that involve our drinking water, our air
25 quality, and I appreciate all NRDC's efforts and

I'd be happy to hear your testimony.

JOSHUA GRAY: Thank you. Good afternoon, Chairman Gennaro and Members of the Committee. My name is Joshua Gray, I'm a law student at the New York University Environmental Law Clinic at the Natural Resources Defense Council.

As you know, NRDC is a national non-profit legal and scientific organization with over 500,000 members and contributors around the nation. NRDC has focused among its priority issues over the years on protection of public drinking water supplies, both nationally and here in New York City. NRDC has devoted considerable attention to improving the quality of the nation's rivers and streams. I'm pleased to be with you this afternoon to testify in favor of Intro 911 on behalf of NRDC.

As the Council has acknowledged, the presence of pharmaceuticals in New York City's drinking water merits the attention of the City government. A number of studies undertaken over the recent years have revealed the existence of tiny amounts of pharmaceuticals, including a wide

1
2 array of prescription drugs and over the counter
3 medications in the water supplies of a number of
4 major metropolitan areas, including New York. To
5 be sure, detected concentrations of such drugs and
6 personal care products in drinking water supplies
7 have been low, but nonetheless, NRDC believes that
8 pharmaceuticals in drinking water represent a
9 small, but emerging, risk to today's public
10 health. This is not to say, however, this
11 contamination presents no risk at all.

12 Recent evidence suggests that
13 pharmaceutical discharges may soon pose a risk to
14 New York's marine ecology as well. Estrogen from
15 pharmaceuticals and industrial detergents that
16 break down into products that mimic the hormone
17 estrogen can contribute to higher levels of
18 estrogen-like materials in treatment plant
19 effluent. These chemicals can build up in the
20 sediments and affect developmentive marine life by
21 depressing the male to female ratio, causing
22 delayed development and reduced hatch and survival
23 rates. Scientists are seeing this occur now with
24 winter flounder in Jamaica Bay with female to male
25 ratios observed as high as 10 to 1.

1
2 NRDC believes that Intro 911, as
3 proposed by this Council, is an admirable first
4 step in confronting this emerging environmental
5 and public health issue. This legislation
6 mandates that New York City's Department of
7 Environmental Protection establish and undertake a
8 regular monitoring program to track the levels of
9 trace pharmaceuticals in our drinking water
10 supply. Through this monitoring, DEP will
11 accurately report to the public on year to year
12 trends in the presence and concentration of
13 pharmaceuticals in New York's drinking water. In
14 addition to its data collection and monitoring
15 functions, this program will no doubt be vital to
16 any future legislative or regulatory response that
17 may be necessary. NRDC supports this bill because
18 it provides a vital monitoring function without an
19 undue burden on finite City resources.

20 Currently, New York City does not
21 have current and reliable information as to the
22 types and concentrations of pharmaceuticals in its
23 drinking water supply. Through this legislation,
24 DEP will be able, with its established and
25 extensive pollution monitoring system, to carry

2 out a sensible program for regular testing of
3 trace pharmaceuticals. As such, this bill will
4 accomplish its important goal without spending
5 unnecessary taxpayer dollars.

6 Accordingly, NRDC encourages the
7 Committee to enact Intro 911 because it will
8 provide a crucial first step in confronting the
9 emerging environmental and public health problem
10 of pharmaceuticals in New York City's drinking
11 water.

12 NRDC thanks the Committee for
13 proposing this legislation and Chairman Gennaro
14 for holding this important hearing. We look
15 forward to assisting the Committee as it moves
16 forward in any way we can. And I'm happy to pass
17 on any questions or requests for further
18 information to Eric Goldstein, who's the senior
19 attorney at NRDC responsible for this issue.

20 CHAIRPERSON GENNARO: Thank you,
21 thank you, Mr. Gray. Certainly this Committee has
22 a long history of working with Eric Goldstein and,
23 yeah, and I think the takeaway from the hearing
24 today is that we've received a good sign from the
25 Administration with regard to working with us to

2 come up with something good, and this good gesture
3 on their part is followed up on the good work they
4 did after our first hearing when they put together
5 this whole monitoring program. So certainly we
6 have an Administration that's taking this
7 seriously, which we're grateful for, and good work
8 is always good and that's what they're doing.
9 Good legislation, I think is a good adjunct and
10 complement to good work, and that's where this is
11 going. And we know we can count on Eric and you,
12 specifically, and NRDC, generally, to help us get
13 to where we want to be on this issue and I thank
14 you for being here today, Mr. Gray.

15 JOSHUA GRAY: Thank you, Mr.
16 Chairman.

17 CHAIRPERSON GENNARO: You bet.

18 CHAIRPERSON GENNARO: Fay Muir of
19 the CWCWC, the Croton Watershed Clean Water
20 Coalition, who was just here on Friday to testify
21 on another watershed related issue.

22 And, Fay, please, sit at the
23 witness table. We certainly want to get the
24 benefit of [off mic].

25 Oh, Chris, you're not going, are

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you?

CHRIS: No.

CHAIRPERSON GENNARO: Okay, fine, okay, good, okay. Fay, sure, Samara, if you could swear in Fay and we'll go.

SAMARA SWANSTON: Please raise your right hand. Do you swear or affirm to tell the truth, the whole truth, and nothing but the truth today?

FAY MUIR: I do. Yes, my name is Fay Muir--

CHAIRPERSON GENNARO: [Interposing] If you could speak right into the microphone, that'd be helpful.

FAY MUIR: My name is Fay Muir, President of the Croton Watershed Clean Water Coalition. Don't have a prepared testimony, but I did want to say that it's a good effort to prepare something that would address this issue. Although I do not believe it's an issue that is at the forefront right now, as you know, you mentioned about the gas drilling.

At the moment, I think that our efforts should definitely be concentrated on

1 hydraulic fracturing. This may be an issue that
2 might never come to the forefront. If we were to
3 address things like how we regulate the
4 pharmaceutical industry, the medical industry, the
5 insurance industry, and that's also something
6 that's on the horizon right now that people are
7 very, very concerned with. I'd just like to say
8 that if we are truly concerned about that, there's
9 one thing that the DEP can do right now, which the
10 Watershed Coalition has been urging them to do for
11 over five years, which is the filtration plant
12 that they're building which is using antiquated
13 technology. If they were to switch to membrane
14 filtration, then that would take care of the
15 problem. And also to mention the problem with
16 bottled water as well because the bottled water is
17 not as regulated and that's something that we use
18 a lot in both the hospitals and everywhere in New
19 York.

21 And I think it would be a good idea
22 to concentrate in those areas, rather than testing
23 of the water because they're doing a very good job
24 on that and we have all the information that we
25 need on that in their annual report.

2 So I thank you.

3 CHAIRPERSON GENNARO: Thank you,
4 Fay. And it's certainly good to get from you a
5 vote of confidence on DEP's testing protocols.
6 I'm sure they're happy to hear that with regard to
7 your recommendation on a different kind of
8 filtration technology for the plant that's being
9 built, certainly that's something that I can take
10 up with them, they're actually here to hear it
11 themselves.

12 And your other issue about making
13 sure we don't take our eye off the ball like with
14 regard to hydraulic fracturing. As long as I'm
15 breathing air, that's never going to happen, so--

16 FAY MUIR: [Interposing] Yeah,
17 that's an imminent threat to--

18 CHAIRPERSON GENNARO: Yeah, that
19 is.

20 FAY MUIR: --this is a possibility
21 of a threat, somewhere--

22 CHAIRPERSON GENNARO: But--

23 FAY MUIR: --where we don't know
24 how far down the road this is going to be.

25 CHAIRPERSON GENNARO: Right, but

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2 certainly, this is an emerging field, it has the
3 caught the attention of national regulators, of
4 state regulators, and local jurisdictions around
5 the country are trying to cooperate with one
6 another to sort of build and inform this growing
7 body of science, I think that's prudent, I think
8 it makes a lot of--it certainly makes sense to do
9 that. And New York should do its part to gather
10 the information we need to protect and inform our
11 own citizens and make a contribution to the
12 scholarship on this issue, you know, to make sure
13 that we have a national policy that makes sense
14 regarding pharmaceuticals, I think we should do
15 that. And we can do that while we're beating back
16 gas drilling at the same time. We can do a lot at
17 once.

18 FAY MUIR: Well the Watershed
19 Coalition has always taken the position that,
20 instead of trying to examine the end product, that
21 we should start with the source and the source is
22 the way we use drugs, the way the pharmaceuticals
23 advertise the drugs, the way the medical community
24 just dishes them out, you know, there's a lot of
25 personal responsibility there, we can't focus

2 enough on that. And if we were to take care of
3 those problems, then--

4 CHAIRPERSON GENNARO: Certainly,
5 right.

6 FAY MUIR: --we certainly wouldn't
7 have to worry about the drinking water. As a
8 matter of fact, those kinds of issues are at the
9 heart of most of the problems that we're having
10 nowadays with global warming, etc.

11 CHAIRPERSON GENNARO: Certainly,
12 but as people working in the environmental
13 movement here, we're not going to turn around this
14 country's appetite for pharmaceutical drugs any
15 more than we're going to turn around the country's
16 appetite for energy consumption. You know, we use
17 more pharmaceutical drugs than any country in the
18 world, we use more energy, you know, more
19 whatever, this is just what we have.

20 FAY MUIR: That doesn't excuse us
21 from tackling those problems.

22 CHAIRPERSON GENNARO: Oh no, no,
23 no, no, that however, is a different Committee of
24 the Council that would have to do that. And so I
25 will definitely hold their coat while they're

2 working on that issue. But--

3 FAY MUIR: [Interposing] I'm sure
4 the environmental group Committee could find a way
5 to hold them accountable.

6 CHAIRPERSON GENNARO: I got pretty
7 broad reach, but I don't know if I can go that
8 far, but hopefully what will come out of this is
9 greater attention to how we deal with and dispose
10 of prescription drugs. And so this bill in no way
11 indicates that we shouldn't try to do that, but we
12 just have to figure out what level of a situation
13 we're really in with this phenomenon and act
14 accordingly, that's all this bill really does and
15 so that's how I think we're going to proceed.

16 But we need you on fracking and I
17 know we have you and we appreciate the CWCWC's
18 efforts in helping to really raise a lot of
19 consciousness about that clear and present danger
20 to the water supply through fracking. And, yeah,
21 that'll be job one, but still we have other jobs
22 that we can do and we're going to do that.

23 So, Fay, thanks very much,
24 appreciate--

25 FAY MUIR: [Interposing] Thank you

2 for--

3 [Crosstalk]

4 CHAIRPERSON GENNARO: --being here
5 today, as always.

6 FAY MUIR: --being considered with
7 all these.

8 CHAIRPERSON GENNARO: You bet, you
9 bet, happy to do that.

10 And with no one else wishing to be
11 heard, no one else has come forward, I want to
12 thank everyone for their participation in this
13 good hearing, and kind of quiet hearing, but I
14 think we got some good stuff done and, you know,
15 we're going to work with the Administration to do
16 something good for the people of New York City and
17 that's, I think that's what our job is, and so I'm
18 happy to have had this hearing today.

19 And no one else wishing to be
20 heard, this hearing is adjourned.

C E R T I F I C A T E

I, Tammy Wittman, certify that the foregoing transcript is a true and accurate record of the proceedings. I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

Signature Tammy Wittman

Date November 8, 2009