CITY COUNCIL CITY OF NEW YORK ----- Х TRANSCRIPT OF THE MINUTES Of the COMMITTEE ON HEALTH ----- Х September 26, 2017 Start: 10:28 a.m. Recess: 12:51 p.m. HELD AT: Council Chambers - City Hall B E F O R E: COREY D. JOHNSON Chairperson COUNCIL MEMBERS: Rosie Mendez Mathieu Eugene Peter A. Koo James Vacca James G. Van Bramer Inez D. Barron Robert E. Cornegy, Jr. Rafael L. Espinal, Jr. World Wide Dictation 545 Saw Mill River Road - Suite 2C, Ardsley, NY 10502

A P P E A R A N C E S [CONTINUED]

Elvis Sovaro Hookah Bar Worker & Advocate

Corinne Schiff, Deputy Commissioner Environmental Health NYC Department of Health and Mental Hygiene

Marechal Brown, Director of Horticulture New York City Department of Parks

Paula Rogovin, Teacher, PS 290

Kindergarten Students, PS 290

Dr. Deepak Kapoor, Chairman & CEO Integrated Medical Professionals Clinical Associate Professor of Urology Icahn School of Medicine, Mount Sinai Hospital NY

Sarah Evans, PhD Children's Environmental Health Center Icahn School of Medicine at Mount Sinai

Dr. Virginia Rauh, Doctorate in Epidemiology Mailman School of Public Health Columbia University

Judith Weiss, Professor Emerita Rutgers University

Lori Hoepner, Assistant Professor Environmental & Occupational Health Sciences CUNY Downstate School for Public Health

Eric Weltman Organizer Food and Water Watch, Brooklyn

Jordan Christensen, Citizens' Campaign for the Environment Deborah Cohen

Eric T. Fleisher Environmental Restoration Specialist

Nicole

2 [sound check, pause] [background 3 comments]

4 CHAIRPERSON JOHNSON: And let's see if 5 there are enough seats first. There are more seats 6 over here. Just fill in. [background comments, 7 pause]

8 SERGEANT-AT-ARMS: For the hearing, if 9 you got a seat, please come here. So, if everyone 10 could please find a seat. You're not going to find a 11 seat on the main floor, not in the center. We are 12 asking them to please go upstairs and you will find a 13 seat upstairs. So, I believe will have a seat. 14 Everyone please have a seat. [background comments, 15 pause] How many more--? Sergeant, could you move? 16 How many-how many more seats do we need for young 17 people? [background comments] But they-but no, 18 they're all, they're per-they're all going to 19 perform. So, they need to be down here. [background 20 comments, pause] Okay. Does everyone have a seat? 21 We're going to get started. [shushing for quiet] 2.2 SERGEANT-AT-ARMS: Please have a seat and 23 quiet down. [background comments, pause] They're-24 they're all performing together. [background 25 comments, pause] [gavel]

SERGEANT-AT-ARMS: Quiet, please.
 CHAIRPERSON JOHNSON: Good morning
 everyone. Good morning everyone.

AUDIENCE: [in unison] Good morning. 5 CHAIRPERSON JOHNSON: I'm Council Member 6 7 Corey Johnson, Chair of the New York City Council's 8 Committee on Health. Today-today the committee will 9 be hearing legislation relating to the use of pesticides by city agencies, and a resolution calling 10 11 for September to be recognized as Prostate Cancer 12 Awareness Month in New York City. Additionally, the 13 Committee will be voting on three pieces of 14 legislation relating to the regulation of hookah 15 smoking in the city of New York. While pesticides 16 can be beneficial to society, they also pose significant risks to humans, animals and the 17 18 environment if not properly used and regulated. In 19 2005, the City Council passed Local Law 37, which 20 prohibited the use of pesticides on city-owned or 21 leased property if they were classified as toxic or 2.2 possibly carcinogenic by the federal government or 23 the State of California. Currently, city agencies are also required to report their pesticide use to 24 the Department of Health and Mental Hygiene and DOHMH 25

must submit an annual report to the Council and Mayor summarizing the use of pesticides used by all city agencies. Today, the committee will be reviewing the city's compliance with Local Law 37 and whether this law is achieving the goal of reducing the city's use of harmful pesticides. [coughs]

6

Introduction 800, sponsored-sponsored by 8 9 Council Member Ben Kallos, which we are hearing today would take Local Law 37 a step further by requiring 10 11 city agencies to with some exceptions exclusively use biological pesticides, which are considered safe for 12 13 human than chemical pesticides. The resolution that we are hearing today is Resolution No. 1588 by 14 15 Council Member Espinal who cannot be here today. 16 This resolution would recognize September as Prostate 17 Cancer Awareness Month in New York City. Prostate 18 Cancer is the most common non-skin cancer among 19 American men, and the American Cancer Society 20 estimates there will be 10,000 new cases of prostate cancer in New York in 2017. Furthermore, the 21 committee will be voting on Introductions No. 139-C, 2.2 23 1075-A, and 1076-A, which address the loophole in our city's Smokefree Air Act that has allowed hookah bars 24

2 to open and operate if they don't serve tobacco 3 containing shisha.

Introduction No. 139-C would prohibit new 4 hookah bars from opening while allowing existing 5 businesses that get a majority of their revenue from 6 7 hookah sales to continue to operate under a strict new set of guidelines including Fire Code and 8 9 ventilation requirements, a new permitting system, and a zero tolerance policy for serving tobacco 10 11 products. I want to thank Council Member Vinny Gentile for his dedication to thoughtfully addressing 12 the dangers of hookah while we consider small 13 14 business that have been operating in our communities 15 for decades. The Council will also be voting on two bills sponsored by Council Member Rodriguez. 16 17 Introduction 1076-A, which will maze-which will raise 18 the minimum age for purchasing shisha, and other non-19 tobacco products, and smoking paraphernalia to 21, and Introduction 1075-A, which will require the 20 21 hookah bars to post signage warning of the dangers of 2.2 hookah smoking. I want to thank the sponsors of 23 these bills that we're hearing today, and we're going to be voting on and for the committed to tacking 24 25 these important health issues. I believe we do not

2	have a quorum at this moment. So, we can't vote on
3	the bills year, but I will hand it over to Council
4	Member Gentile if he has a statement he wants to make
5	on the bills that we'll be voting on, and then I'm
6	going to hand it over to Council Member Kallos who's
7	going to talk about his bill that's being heard
8	today. Council Member Gentile.

9 COUNCIL MEMBER GENTILE: Thank you. I 10 wish more members were her to hear it, but that's-11 that's good. Thank you, council member. This issue 12 of unregulated shisha smoking whether it contains 13 tobacco or not, first came to-came to me seven years 14 ago when parents of youngsters, youngsters a little 15 bit older than the youngsters we have in the audience 16 today approach me and they were concerned about their 17 underage children going to lounges to smoke hookah 18 with their friends. Much like the cigarette-19 cigarette ads of the '70 people especially teen-agers 20 were attracted to this perceived safe smoke 21 masqueraded by flavors like Blue Bonnet and Pirate's Cave, and because shisha smoking mostly done through 2.2 23 hookah pipes is unregulated, and not subject to the city's Smokefree Air Act, youngsters are free to 24 smoke at will in these establishments, but let me be-25

14

2 let me clear the air once and for all. Hookah 3 smoking—

4 MALE SPEAKER: [interposing] I think we 5 need to find.

COUNCIL MEMBER GENTILE: -- even without 6 7 Nicotine is not safe smoke. Because of deeper 8 inhalations, more carcinogenic chemicals and longer 9 durations of smoking up to 45 minutes in one hookah session compared to a five-minute cigarette smoke. 10 11 One session of hookah smoking is equal to smoking 80 to 100 cigarettes according to the Center for Disease 12 Control and Prevention. 13

SERGEANT-AT-ARMS: Sir, keep it down.

COUNCIL MEMBER GENTILE: Because New York 15 16 City Smokefree Air Act passed in 2002, which outlawed 17 indoor tobacco smoking did not include non-tobacco 18 shisha smoke, the unregulated hookah smoking rose 19 exponentially. In its cross hairs were the lungs of 20 unknowing youth [background comments] unsuspecting restaurant patrons and those oblivious to its health 21 The elephant in the room is no longer with 2.2 risks. 23 Intro 139-C because the best way to tame this health menace is by adding non-tobacco shisha to the 24 Smokefree Air Act, and that is what Intro 139-C 25

2 accomplishes. We went through multiple versions of 3 the bill working with the Administration to fine tune 4 the language. We sat through hundreds of meetings wit advocates, academics and stakeholders from all 5 perspectives. We listened-we listened to hours upon 6 7 hours of testimony, and we finally have arrived at 8 the Health Committee vote for Intro 139-C, which add 9 non-tobacco shisha, i.e., hookah smoking to the Smokefree Air Act. On this journey we have partnered 10 11 with Council Member Ydanis Rodriguez who, too, has faced concerns from his constituents about hookah 12 13 smoking. We've also been guided by Council Member Corey Johnson, the Chair of our committee who has 14 15 helped push our efforts in this capacity, and I want 16 to thank him. Today, in this committee and tomorrow 17 in the City Council we will finally have the 18 opportunity to pass Intro 139-C adding non-tobacco 19 shisha, mostly smoke through hookah pipes to the 20 Smokefree Air Act. We will grandfather in businesses 21 who have at least 50% revenue from the sale of non-2.2 tobacco hookah products and place for the first time 23 safety ventilation, sterilization and health regulations on the industry. The bill also has new 24 minimum age requirements for entry into hookah 25

lounges. We are codifying the fact that hookah smoke 2 3 is not safe smoke, and in so doing we are protecting 4 the integrity of the Smokefree Air Act and underscoring the ongoing attempt by the City to 5 denormalize smoking. This has been a long journey, 6 7 and I have to thank my colleagues in government 8 again, Council Members Johnson and Rodriguez both for 9 being strong proponents for this regulation and Chairman Johnson for allowing this bill to be heard 10 11 several times, and bringing it to the-to the 12 committee vote today. Also, I want to thank the 13 administration particularly those at the Department 14 of Health and Mental Hygiene who really, really sat 15 down with us and-and was a willing partner with us on 16 this, and worked very, very hard to get to this 17 point. On the staff I'd like to thank Ramon 18 Martinez, Laura Popa, and David Seitzer, who was 19 instrumental in getting a handle on all parts of this 20 issue, and who labored through all the meetings and 21 the hearings, and the numerous drafts on this bill. 2.2 Also to Crystal Pond, Ze-emanuel Hailu and my 23 Legislative Director Jonathan Shubshakies [sp?]All of us have persevered to get to this point, Mr. 24

11

2	Chairman, and so I encourage my colleagues on the
3	Health Committee to vote for Intro 139-C. Thank you.
4	CHAIRPERSON JOHNSON: Thank you, Council
5	Member Gentile. Congratulations. You've done a
6	great job on this. Council Member Rodriguez, do you
7	have a statement you want to make before we have the
8	vote today? And if Elvis Sovaro wants to come up to
9	testify, I believe that's the only person here to
10	testify on this legislation here today before we
11	vote, but Council Member Rodriguez is going to make a
12	statement and then you may testify, sir.
13	COUNCIL MEMBER RODRIGUEZ: [off mic] Good
14	morning. [on mic] Good morning. Sorry for being
15	late even though I'm not a member of this committee,
16	but we have a great chairman of this committee. I
17	wasn't here because we were in a march against
18	domestic violence in Northern Manhattan. I'm Council
19	Member Ydanis Rodriguez and lead sponsor of Bills
20	1075-A and 1076-A, two actions in protecting our
21	youth and thank you all the youths for being here.
22	From become susceptible to smoking later in life and
23	its accompanying health risks. New York at the city
24	and the state levels has been successful in curbing
25	cigarette use and its health impacts. Now, we're
l	

2 faced with the similar challenges where the use of 3 hookah is becoming prevalent. Advertising makes it 4 appealing to youth, and the public knows little about the consequences of the youth. Many research is 5 being established in that 40 minutes of hookah is 6 7 equal to 120 cigarettes and that's why it has been-it 8 has been abolished. It has been banned in Toronto, 9 L.A. and even in the Dominican Republic. We address the issue of non-tobacco shisha use in our city, and 10 11 we must do it now. We must get ahead of this issue 12 before it gets out of our hands. As with cigarettes, 13 our communities of color are most negatively 14 affected. If we will have so many restaurants and 15 night life selling hookahs in the middle-class 16 community, it will be closed right-those 17 establishments will be closed right now. In the last 18 decade, hookah smoking has more than doubled among 19 Hispanic youth and more than tripled among black 20 youth according to the Department of Health and 21 Mental Hygiene. New Yorkers between 18 and 20 are 2.2 three times more likely to smoke hookah than people 23 21 and older. Bills 1075-A and 1076-A requires signage warning of the health risks associated with 24 smoking shisha and non-tobacco smoking establishments 25

2 and raise the age of hookah use from 18 to 21 just 3 old-year-year old. We must also be mindful of this 4 secondhand hookah smoke health impact on workers of hookah establishments. I'm so happy that yesterday I 5 went to a nightlife club yesterday, and most of the 6 7 workers they're saying we are so grateful that we are 8 moving to take hookah out of the nightlife because we 9 the workers suffer from the impact. They are exposed to harmful particulate matter and intoxicants that 10 11 make us cancer, cardiovascular disease and decreased 12 long function. I want to commend my colleague 13 Council Member Gentile for addressing this danger by 14 introducing Bill 139-C, which will include non-15 tobacco shisha and the Smokefree Act and regulate its use in bars, restaurants and other places. 16 This 17 package of bills 139-C, 1075-A and 1076-A put the 18 health and wellbeing of New Yorkers first. We need 19 to protect our youth. I want to thank Chairman 20 Johnson, Council Member Gentile, the members of the 21 Committee on Health, Commissioner Dr. Mary Bassett, 2.2 and her team at the Department of Health. [Speaking 23 Spanish]

CHAIRPERSON JOHNSON: Thank you, CouncilMember Rodriguez. Mr. Sovaro, you have two minutes.

2	ELVIS SOVARO: Thank you, Committee, Mr.
3	Rodriguez. Thank you being here. You're the person
4	I really want to speak to. We have hundreds of
5	restaurants in the five boroughs, thousands, if not,
6	and maybe 3,000 to 4,000 employees that requires this
7	type of service. If we don't have hookahs in most of
8	these establishments, they will be closing due to the
9	fact that we can't continue in business with the
10	changes and all the hikes and rents and also an
11	hourly rate. I stand here today to let you know that
12	if this bill goes through, you will be putting 3,000
13	to 4,000 employees out on the streets. They don't
14	sell drugs. They don't party outside. All they do
15	is work and pay their bills. How are they going to
16	pay their bills if they don't have a job, Mr.
17	Rodriguez? You say here today that secondhand
18	smoking is one of the causes of this bill. Have they
19	done the study to actually conclude that secondhand
20	smoking of hookah affects in that nature? You and I
21	have sat in the past, and we've discussed this many
22	times. I work to pay to my mortgage. So, do most of
23	these kids, and they work to pay their bills. If we
24	lose, we lose our livelihood. Sometimes we've got to
25	do more tests and inquire more information before we

25

2 go forward. Let's sit down and come to a mortal 3 grounds. I totally agree that most of these bills 4 should go opposed--

5 CHAIRPERSON JOHNSON: [interposing] You 6 are right in that.

7 ELVIS SOVARO: --but 21 and over I'm fine with that. Regulations I am fine with that, but most 8 9 of these hookah bills are no more than 760 square feet to maybe 500. They don't have an area to 10 11 identify where they should be smoking. Let us do our 12 job. Let's us continue paying our bills. If you 13 want to put us to the street, this is on your head, 14 not ours. Thank you. 15 CHAIRPERSON JOHNSON: Thank you, Mr.

Sovaro. [coughs] I'm going to ask the clerk to call the roll on the pieces of legislation that we're voting on today.

19 CLERK: Committee Clerk Matthew
20 DiStefano, Committee on Health. Roll call vote for
21 items 139-C, 1075-A and 1076-A. Chair Johnson.
22 CHAIRPERSON JOHNSON: I want to
23 congratulate Council Members Rodriguez and Gentile
24 for working very hard on this legislation. It is

absolutely going to save lives, and I believe both of

1	COMMITTEE ON HEALTH 17
2	these piece of legislation, the package will be
3	legacy pieces of legislation for both of you because
4	of the impact it's going to have on the public health
5	of the New Yorkers. So, I congratulate both of you.
6	I'm proud that this committee heard these bills and I
7	proudly vote aye on all.
8	CLERK: Eugene.
9	COUNCIL MEMBER EUGENE: I vote aye.
10	CLERK: Koo.
11	COUNCIL MEMBER KOO: Aye on all.
12	CLERK: Vacca.
13	COUNCIL MEMBER VACCA: I am proud to be a
14	prime-to be the prime co-sponsor with my colleague
15	and friend Council Member Rodriguez on both of his
16	bill and to be a prime co-sponsor with Councilman Koo
17	on Councilman Gentile's bill. My position in this
18	Council for 12 years has been very clear: Smoking
19	kills, and I have supported all legislation
20	concerning reigning in smoking, electronic cigarettes
21	and my position in the hookah legislation is
22	consistent with that. We have to protect our young
23	people. We have to protect those who do not want the
24	cancer causing impact of secondhand smoke. This
25	legislation has gone through hearings and discussions

2	in this council. It is the right thing to do, and
3	from the very inception, I was supportive of these
4	measures and nothing has taken-taken place that would
5	indicated that I should reconsider, and I'm proud to
6	work with my colleagues, and I thank the Speaker and
7	Chair Corey Johnson for moving these to a vote, and I
8	vote aye on all.
9	CLERK: Van Bramer.
10	COUNCIL MEMBER VAN BRAMER: I vote aye.
11	CLERK: By a vote of 5 in the
12	affirmative, 0 in the negative and no abstentions,
13	the items have been adopted.
14	CHAIRPERSON JOHNSON: We are going to
15	keep this vote open. Oh, Council Member Barron is
16	here. Council Member Barron, we're voting on three
17	pieces of legislation related hookah, and amending
18	the Smokefree Air Act, and the clerk is calling the
19	roll.
20	CLERK: Council Member Barron.
21	COUNCIL MEMBER BARRON: I vote aye.
22	CLERK: The vote now stands at 6 in the
23	affirmative, 0 in the negative and no abstentions for
24	approval.
25	

2 CHAIRPERSON JOHNSON: Thank you to the 3 clerk. We're going to keep the roll open for a 4 little while during this hearing. With that, I want 5 to thank my colleagues, congratulate Council Members Rodriguez and Gentile. I'm going to call up Deputy 6 7 Commissioner Corrine Shift rom the Department of Health and Mental Hygiene who is going to be 8 9 testifying on Local Law 37 as well as Introduction No. 800, spooned by Council Member Kallos. 10 I want to 11 apologize. I have to-for the-for the young people 12 here today, I have to run on a quick field trip to 13 the Highline because the Mayor is going to the 14 Highline, and that's my district. So I have to go 15 meet the Mayor at the Highline. I'm going to hand 16 the hearing over to Council Member Kallos whose bill we are hearing today, and I will be back before the 17 18 end of the hearing. With that, I want to turn it 19 over to Deputy Commissioner Corrine Schiff. Thank 20 you very much. [background noise] 21 DEPUTY COMMISSION SCHIFF: Good morning and good-bye Council Member-Chairman Johnson. 2.2 23 Council Member Kallos and members of the Health Committee, I'm Corinne Schiff, Deputy Commissioner 24 for Environmental Health at the New York City 25

2 Department of Health and Mental Hygiene. I'm joined 3 by colleagues at the Department of Education, 4 Sanitation and Parks and Recreation, as well as the New York City Housing Authority. On behalf of 5 Commissioner Bassett, thank you for the opportunity 6 7 to testify today on the department's role under Local Law 37 of 2005, and on Introduction 800. Local Law 8 9 37 established requirements for pesticide use on property owned or leased by New York City including 10 11 prohibiting the application of certain pesticides 12 requiring public notification and mandating that city 13 agencies annually report pesticide use. With 14 enactment of Local Law 37, New York City became the 15 largest city in the nation to regulate the use of pesticides on city-owned and leased property. Local 16 Law 37's pesticides prohibitions were phased in over 17 18 time. By November 2006, pesticides classified as of 19 2005 by the United States Environmental Protection 20 Agency as Toxicity Category 1 as carcinogenic, which 21 includes possible, probably, likely or known human 2.2 carcinogenic or by California as a developmental 23 toxicant could no longer be applied on city-owned or leased property. The law provides limited exemptions 24 for certain pesticides and for particular locations. 25

Moreover, the law allows agencies to seek a waiver of 2 the prohibition from the department. Wen deciding 3 4 whether to grant a waiver, the Local Law directs the department to consider the magnitude of the pest 5 infestation, the threat to public health, the 6 7 availability of effective alternatives and the 8 likelihood of human exposure. A major aim or Local 9 Law 37 was to shift the city's approach to pest control away from a sole reliance on pesticides and 10 11 toward Integrate Pest Management, or IPM. ΙPΜ 12 focuses on eliminating the underlying conditions that 13 are conducive to pest infestation. For example, by a containing garbage in order to deny pests food; 14 15 repairing leaks to reduce pests access to water; 16 eliminating nesting areas, and repairing holes or 17 ceiling cracks or gaps that allow pests to freely 18 move about. IPM relies on low-risk pesticide use as 19 only one piece of a comprehensive strategy. The 20 Local Law required the department to create a 21 citywide IPM plan, and to semi-annually convene the 2.2 citywide Pest Management Committee so the agencies 23 can share best practices. The Local Law's emphasis on IPM recognizes the concerns about both the 24 potential links between pesticide exposure and 25

2 disease, and the health risks presented by pests. 3 Mice and roaches are asthma triggers. Rats can 4 contaminate food. Mosquitos are vectors for the West Nile Virus, and bed bugs can interrupt sleep and 5 negatively impact mental health. Balancing the 6 7 interests in reducing exposure to pesticides, and 8 pests is at the heart of the local law, and the 9 department's Pest Control Program. Striking this balance is critical to our work, and IPM is the most 10 11 effective way to control pests while also protecting 12 public health by reducing pesticide exposure. The 13 department uses IPM in our own pest control work 14 limiting pesticide use as much as possible. Because 15 city agency pesticide applications account for only a 16 small fraction of pesticides used in New York City, 17 less than an estimated 3% of the total volume of 18 liquid pesticides and under a quarter of total pounds 19 of solid pesticides applied. The department 20 publishes educational materials and provides free 21 training to private property managers and members of 2.2 the public on implementing IPM in a variety of 23 settings. And the department has authorized under the New York City Health Code to mandate the 24 25 implementation of IPM by private property owners

2 under certain circumstances enabling our agency to extend the use of IPMs beyond the city's own pest 3 4 management work. The department's use and promotion of IPM is critical to our effort to reduce health 5 disparities. We know that the presence of 6 7 residential pests is tied to housing quality and that New Yorkers of color and those living in high poverty 8 9 neighborhoods bear a heavier burden of pest infestations, and pest related health conditions such 10 11 as severe asthma. Judicious application of 12 pesticides and the implementation of other strategies 13 through IPM have been critical to the promotion of 14 healthier environments in these settings. An example 15 of how the department works to address this inequity 16 is through our Healthy Homes Program, which conducts 17 IPM for pest infestations in homes of children with 18 severe asthma. To monitor progress in reducing pesticide use on city property, Local Law 37 requires 19 20 agencies to report use data to the department each 21 year. The department consolidates the agency information into a single report to the City Council 2.2 23 that includes an analysis of trends in pesticide use across the city. The department's 2016 Pesticide Use 24 25 Report shows that Local Law 37 has led to an overall

2 decrease in pesticides use by city agencies, and an 3 increasing reliance on IPM.

4 I will not turn to Intro 800, which would authorize the use of only biological pesticides 5 unless there was an applicable exemption or issuance 6 7 of the waiver by the department. The department 8 appreciates the intent of this bill to further reduce 9 pesticides use on city property, and we share this We are concerned, however, that the proposed 10 qoal. 11 change would hamper the city's ability to control 12 certain pests as the extent-at the expense of public 13 health. There is no biological alternative for the 14 control of certain pests including roaches, and 15 biological pesticides along are insufficient to control others such as bed bugs, and the mosquitoes 16 17 that are vectors for West Nile Virus. When a child's 18 asthma is triggered by roaches and she's living in a 19 roach infested apartment, the swift effective 20 application of low-risk pesticides of part of a 21 comprehensive IPM strategy can be critical to the protection of her health. The prohibitions set out 2.2 23 in Intro 800 would make it harder for the city to provide the pest control that family needs-families 24 need. We look forward to working with the Council to 25

2 find ways to further reduce pesticide use in the 3 city. Thank for the opportunity to testify, and I 4 would be happy to take questions.

5 COUNCIL MEMBER KALLOS: Thank you. Τ just wanted to take a moment to do my quick 6 7 statement, which is slightly out of order. Usually, 8 it's before the testimony. I just wanted to thank 9 Chair Johnson, his Legislative Director Louis Cholden-Brown, the Committee's Counsel Ze-Emanuel 10 11 Hailu for what will be one of the most unique, if not the cutest hearings of all time. In 2015, I was 12 13 visited by a group of kindergarteners and first graders from PS 290 who came for a tour of City Hall, 14 15 and sang me a song about pesticide use in city parks. 16 This was the start of a lot of research, and a lot of 17 learning on a question that should concern everyone. 18 Are the chemicals we spray in our parks and green 19 spaces safe for us, our kids, our pets? Out of this 20 effort came Introduction 800, which expands the list 21 of already banned chemicals to include all non-2.2 biological pesticides, and in addition to often being 23 less toxic. Bio-pesticides are often more narrowly targeted to eliminate the desired pest or weed rather 24 than affecting a broad range of organisms. According 25

to the EPA, they also are often effective in small 2 3 amounts and quickly decompose making less of an 4 environmental impact on synthetic pesticides. They city's most heavily used liquid herbicide is Roundup, 5 which was sprayed 1,240 times in 2015. According to 6 7 your data, studies including those from the World 8 Health Organization have indicated that Roundup is 9 particularly harmful to children's health. Six countries, one state and many localities have banned 10 11 its use, and New York should, too. There are other 12 better alternatives that will allow us to enjoy our 13 parks without worrying whether we're touching or ingesting dangerous poisons. I think if you've eve 14 15 been in a park, and I think all the parents who are here with their kids can testify how hard it is to 16 17 keep kids who are playing from putting their hands on 18 their face and on their mouth so, very quickly after 19 touching things that may have been sprayer. There are 20 other better alternatives that will allow us to enjoy 21 our parks without worrying whether we're touching or 2.2 endangering-these dangerous poisons. There's a lot 23 to discuss on the subject including not just when and how and what kinds of pesticides we use in our parks 24 and other city-owned or leased properties but also 25

about the methods we use to maintain those areas, and 2 3 whether we're satisfied with the status quo of 4 regular applications of pesticides to kill weeds. Ι hope DOHMH and the agencies use this hearing as an 5 opportunity to talk about holistic methods of caring 6 7 for our parks in a sustainable green and healthy way. 8 I want to thank the Chair and everyone involved in 9 this hearing. I also want to take a moment to thank PS 290, our teacher Paula Rogovin, our Principal 10 11 Doreen Esposito, and the countless parents who are 12 here, and the countless children who are incredibly 13 well behaved. [cheers/applause] So, I-I will just beg your indulgence. You've been so great, and so 14 15 we're going to ask this person from the Department of 16 Health some quick questions. Two of my colleagues have those questions, and then I believe we will be 17 18 getting to see a brief performance, which is I think 19 a first at least for me in the-these first term. 20 [background comments, pause] So, just a quick 21 question. I appreciate the over testimony. I think 2.2 our main focus is on Roundup and just the pesticides 23 we're using in parks where kids are playing. So, I think the one we're most focused on again is Roundup. 24

27

1 COMMITTEE ON HEALTH 28 It's Glyphosphate-Glyphosate. Do you believe that 2 3 it's harmful to humans? 4 DEPUTY COMMISSION SCHIFF: My colleague from the Parks Department is going to take that 5 question. [background comments] 6 7 Okay. Can you hear me now? DEPUTY COMMISSION SCHIFF: Yes. 8 9 Thank you. I'm very pleased to Great. 10 be here to represent-11 COUNCIL MEMBER KALLOS: Hold on. We're 12 just going to swear you in. Oh, I haven't been through this process 13 14 before. 15 COUNCIL MEMBER KALLOS: Do you affirm to 16 tell the truth, the whole truth, and nothing but the 17 truth in your testimony before this committee and to 18 respond honestly to Council Member questions? 19 MARECHAL BROWN: T do. 20 COUNCIL MEMBER KALLOS: Great, and if you 21 can state your name for the record. 2.2 MARECHAL BROWN: My name is Marechal 23 I'm the Director of Horticulture for New York Brown. City Parks, and I appreciate the chance to speak with 24 you and other members of the committee, Council 25

2	Member Kallos, on this very important issue. I did
3	not hear your questions as I was getting up to sit
4	down. So, if you could repeat it, please.
5	COUNCIL MEMBER KALLOS: Do you believe
6	the Glyphosate is harmful to humans?
7	MARECHAL BROWN: I can't really say
8	whether it is harmful to humans. There's a lot of
9	studies out there that point in different directions.
10	I would say that as a member of an agency that
11	applies Glyphosate, that we're always looking at all
12	the health implications whether they're of the risks
13	of a particular pest, and in-in the case of
14	Glyphosate a weed or the risks of the chemical that's
15	used.
16	COUNCIL MEMBER KALLOS: When we started
17	this work out of the mouths of babes comes truths.
18	Shortly as we were introducing Introduction 800, the
19	World Health Organization raised concerns about its
20	carcinogenic properties. Do you share those
21	concerns?
22	MARECHAL BROWN: I think I can say-safely
23	say that all of us are always looking into the
24	research and we're certainly concerned about any
25	health implications of any product that we use
1	

1 COMMITTEE ON HEALTH 30 2 whether it's a gas power motor or weed wacker, and 3 the effect that might have on air pollution or a 4 pesticide of any kind. 5 COUNCIL MEMBER KALLOS: And so, the parks are for our kids. 6 7 MARECHAL BROWN: Absolutely. 8 COUNCIL MEMBER KALLOS: And so, if a 9 parent takes their child in the morning to a park, the child plays in grass, which they're allowed to 10 11 do, and they touch their face, they touch their 12 mouth, they put their hands in-in their mouths, and 13 like perhaps such their thumb, which is a nasty habit 14 all of us have to kick at some point in our lives 15 [laughter] and they-they are playing on grass that's 16 been sprayed by Glyphosate, do you have any concerns 17 about that? 18 MARECHAL BROWN: Actually, Parks 19 addresses that very clearly and aggressively. First 20 of all, we-we have had a marked decline in the amount 21 of herbicides that we're using over the years, and 2.2 Department of Health and Mental Hygiene has all of 23 those records, which I believe they've shared with the Council. I would also say that as a Parks' 24 25 policy, we never use herbicides in playgrounds. We

2	do not use them in dog runs. We don't use them in
3	active recreation areas, and as a matter of fact, we
4	don't use them on lawns because they would kill the
5	grass. So we use other methods, mostly manual
6	methods to deal with weeds that are in lawns. Where
7	we do apply herbicides, we post signs as per state
8	and local regulations. So, the signs go up 24 hours
9	in advance for the state and at the time of
10	application in-to follow city rules.
11	COUNCIL MEMBER KALLOS: So, if I-if I go
12	into Carl Schurz Park Playground and I don't see any
13	signs about herbicides or pest abatement, even if I
14	see those boxes with the holes in them, I-even though
15	I may see the boxes with the holes in them, if
16	there's no signs, it means that there's no
17	pesticides, no abatements, no toxins in the
18	environment?
19	MARECHAL BROWN: The rules actually do
20	not apply because it's a-it's considered a public
21	health model. We are not required to post signs when
22	Rodenticide is put out in those big boxes and traps.
23	As a general courtesy, we do tend to put those signs
24	up when we use Rodenticide, but it is not required by
25	law.

2	COUNCIL MEMBER KALLOS: Would you be open
3	to include reporting on where the-there's herbicides
4	and other chemicals are being sprayed as well as-so-
5	so if you're using a biocide, which parks are you?
6	So, right now we know the universe of how many times
7	it's sprayed. We just don't know where you're
8	representing that it's not being sprayed in
9	children's parks, which is very good news for us to
10	hear. Would you be open to tagging the sprayers with
11	the locations?
12	MARECHAL BROWN: At this particular
13	moment, I could not but we have all that information,
14	and we have supplied it to the Department of Health.
15	COUNCIL MEMBER KALLOS: And in the
16	interest of time, I'm going to have the Committee
17	Counsel forward additional questions that we received
18	groups like Beyond Pesticides, and Mount Sinai. I'm
19	going to go to Council Member Peter Koo followed by
20	Council Member Inez Barron. We've been joined by
21	Council Member Rosie Mendez. [pause]
22	COUNCIL MEMBER KOO: Hi, good morning.
23	How are you? Thank you for coming to testify. I'm
24	Council Member Peter Koo. I am from Council District
25	20, which is Downtown Flushing, and the surrounding

2 areas. In my area we have a lot of restaurants. We 3 offer a few hundred restaurants, supermarkets and 4 it's also a downtown transit hub. So, we have to-and we have the 7-Train, the Long Island Railroad. So, I 5 found we have a lot of parks with rats, you know, and 6 7 roaches, and the worst problem is the rats problem. Along Fordham we have Long Island Railroad-we have a 8 9 Long Island Railroad entrance [background noise] because of-there's a-in the evening time, a lot of 10 11 rats come out, you know. We see hundreds of rats 12 along the hill. They're like on the station 13 platform. So I wonder whether city has done anything 14 on-on that property, or it's solely the jurisdiction 15 on the MTA to do it? So, can you, you know. Can the 16 city do anything on that or only the MTA is doing it? 17 DEPUTY COMMISSION SCHIFF: So, we have a 18 very robust rodent control program including through 19 a specialized program called Rat Reservoirs--20 COUNCIL MEMBER KOO: Uh-hm 21 DEPUTY COMMISSION SCHIFF: --which is 2.2 where we take a neighborhood approach, an IPM 23 approach to controlling rats. As I noted in my testimony, controlling pests like rats requires that 24 comprehensive strategy that addresses the food-the 25

2 food that rats eat, the access water, making sure 3 that they don't have the ability to move around by 4 ceiling cracks and holes. And in the area that you've described, we do have one of these rat 5 reservoir programs. I'd be happy to get back to you 6 7 with some specific details about-about the work that 8 that we've done in-in exactly that neighborhood. We 9 also do a lot of work educating restaurants and-and businesses in the neighborhood. We have particular-I 10 11 brought with me-this a document we send out to all 12 the restaurants and it includes specific information 13 for restaurants to teach them how to use IPM as well. But we can get back to you with some details about 14 15 that.

16 COUNCIL MEMBER KOO: I think some of the 17 problems they're so-the past-population is we have so 18 many like tunnels and the MTA tunnels, and the-we are 19 the only-they're now existent. There are a lot of 20 people who drink and eat on the trains. So, if we 21 can, you know, do modifications with those two 2.2 things, like no drinking or eating on trains, you 23 know, that will cut down a lot of pest population in New York City because this person move around, and 24 there is such a big tunnel for them to move around, 25

2 and their food and whatever they drink, you know. 3 So, you know-you know, we're not doing anything to 4 help this-sanitation of the station. The second 5 thing I want to say is that in my area in some parks there's a lot of mosquito problems. Mosquitos they 6 7 usually will stay with the-the water, but I found out 8 just in one park we have the Bowne House. They come 9 down from the bushes. So, I want you guys to maybe take a look, and how to control this mosquito 10 11 problem, you know on Bound Street near the Bowne 12 There's a pavement [sic] around there, you House. 13 know, a lot of problems containing about-too many 14 mosquitoes there. So, they're afraid to go the park 15 like at 5:00 or 4:00 or 5:00 p.m. and mosquito will 16 come out. So, those are two problems. How to 17 control the rats in downtown, and maybe you can go 18 through a seminar in our area, and teach the 19 restaurant owners how to contain their extra garbage, 20 how to secure the garbage so the rats cannot eat-eat 21 those things. 2.2 DEPUTY COMMISSION SCHIFF: We'd be happy 23 to do that. We worked with your colleagues on--

24 setting up trainings in the different districts, and 25 we'd be happy to be in touch with you about setting

1 COMMITTEE ON HEALTH 36 2 up a training in your neighborhood, and we'll also 3 get back to you about that particular mosquito area 4 and-and follow up with you about that. 5 COUNCIL MEMBER KOO: Okay, thanks. Yeah. COUNCIL MEMBER KALLOS: Thanks. Thank 6 7 you. I'd like to go to the Committee Clerk to finish 8 calling the roll. 9 CLERK: Continuation of roll call Committee on Health. Roll call on Items Intro 139-C, 10 11 1075-A and 1076-A, Council Member Mendez. 12 COUNCIL MEMBER MENDEZ: I vote aye. 13 CLERK: The current vote stands 7 in the 14 affirmative, 0 in the negative and no abstentions. 15 Thank you. COUNCIL MEMBER KALLOS: 16 Thank you. We 17 will close the roll. Next up is Council Member Inez 18 Barron followed by testimony from the PS 290 19 children. 20 COUNCIL MEMBER BARRON: Thank you, Mr. 21 Chair. I just had one brief question for the Commissioner 2.2 23 DEPUTY COMMISSION SCHIFF: There was a notice that was sent to my office about control of 24 raccoons. There's been an outbreak of raccoons on-in 25

2	the East New York section of Brooklyn. There's a lot
3	of construction going on, and I received a notice but
4	there was not any widespread public notice given to
5	the residents. The notice that I received said it
6	would be packets similar to ketchup packets and
7	condiment packets that would be dropped by air. So,
8	I wanted to know did it happen? What were the
9	contents of that packet, and how can greater notice
10	be given to the community that this is what's
11	happening? Do you have a question? Do you have an
12	answer? [pause]
13	DEPUTY COMMISSION SCHIFF: Thank you for
14	your question. We-I'm not sure. We haven't seen
15	exactly that notice. We'd love to take a look at
16	that. What we think you're referring to is a notice
17	of from the USDA.
18	COUNCIL MEMBER BARRON: Could you speak a
19	little louder?
20	DEPUTY COMMISSION SCHIFF: Yes. Sorry.
21	We'd be happy to take a look at exactly that notice,
22	but we can see exactly what you are referring to. We
23	believe it's likely a notice from the USDA, the
24	United States Department of Agriculture. They have
25	done some work to control raccoons in the interest of
ļ	

37

2	reducing rabies. Raccoons can be a vector for
3	rabies. So we think that that's what that's about,
4	but we'd be happy to look at that notice and get back
5	to you in detail.
6	COUNCIL MEMBER BARRON: Okay, good
7	because I would like to know what the contents where
8	the notice said it was harmless, but I'd like to know
9	what category it fall in, and I understand that are
10	different categories for the information. So, I'll
11	send you that information.
12	DEPUTY COMMISSION SCHIFF: It may not be
13	from us, but we'd be happy to look at it.
14	COUNCIL MEMBER BARRON: Great. Thank you
15	so much.
16	DEPUTY COMMISSION SCHIFF: Yes.
17	COUNCIL MEMBER BARRON: Thank you, Mr.
18	Chair.
19	COUNCIL MEMBER KALLOS: Thank you. I'm
20	going to ask the Administration to just remain while
21	we take some testimony. So, I'm now going to call up
22	kindergarten teacher Paula Rogovin and PS 290
23	children and families, current and former students.
24	The school is located at 311 East 82 nd Street and
25	[background comments] If we can make sure to get some

1 COMMITTEE ON HEALTH 39 mics turned on so that folks can hear this at home. 2 3 [background comments, pause] For those watching at 4 home-- [background comments] SERGEANT-AT-ARMS: Will you keep it down 5 [background comments] 6 please? 7 COUNCIL MEMBER KALLOS: So-so we just, we are now going to hear from the PS 290 kids and we 8 9 want to thank you for your testimony, and when I ran for office, I said I wanted to have an open office 10 11 where residents would get to introduce legislation if 12 they wanted to, and you were the first group of kids 13 and first people in my district to take me up on that offer, and so I'm very proud to have this happen 14 15 today. And so, we will turn it over to you. 16 PAULA ROGOVIN: Thank you. My name is 17 Paula Rogovin. I've been teaching 44 years in the 18 New York City Public Schools, and I still love it. 19 Our Principal Doreen Esposito is here with us, and 20 many of the family members and, of course, my current 21 kindergarten class and my former students. Kindergarten kids are four and five years old. 2.2 The 23 other children are now in first to fourth grade. Ι love them and I love their families. In 2014, my 24 kindergarten students were doing research about foods 25

2 in our lunch room. We call it the café. They wanted 3 to know about fruits such as watermelon and tomatoes. 4 They wanted to know how these fruits were grown. In 5 the process of doing their research, we found out that some people use toxic pesticides to kill inset 6 7 pests, and that these pesticides sometimes harm farm 8 workers and gardeners, animals in nearby waters, and 9 they even can harm people who eat the food like us. The children were upset about that. So we decided to 10 11 do something about it. I-I strongly believe that 12 when children are upset about something that's really 13 bad, it's really important that they-we help them 14 become proactive. We made a list about things we 15 could do-of things we could do about this problem. 16 We learned about what we call in our-in our school 17 nature's pesticides. What are some of them? Lady 18 bugs. 19 Preying mantises. STUDENT: 20 PAULA ROGOVIN: Preying mantises. Yeah, 21 all sorts of things. Bats. So, we-we interviewed 2.2 Jerry Balsom who's over here and Iris Balsom, 23 grandparents of four our children, my former students. They taught us about pesticides as well as 24 25 how they are working in Long Island to get

2	legislation to ban the use of toxic pesticides. We
3	wrote a newsletter so that we could teach other
4	people. We wrote a play so that we would teach our
5	families and all the people in our school. Then the
6	children said we're going to change the law. We want
7	a new law. When the Councilman Ben Kallos came to-
8	Ben Kallos came to our school-sorry about that-in
9	2014, that's a long time ago. [background comments]
10	Yeah, but children told him about the research, and
11	he invited us to come to City Hall. So, we were here
12	in this room. If you were one of those kids, now in
13	fourth grade, raise your hands. Yeah, yeah, and the
14	Council Chamber was really empty at the time.
15	Children asked a lot of-lot of questions, and then
16	Councilman Kallos in the most serious voice and
17	serious look on his face said is there anything he
18	could do for us? Is there anything you want me to do
19	for you? In their wonderful spirted way they said to
20	the Councilman: Ban toxic pesticides. Use only
21	nature's pesticides. Pass a law. And he looked at
22	them very seriously and he said, I promise I will
23	try. One year later he contacted the school and
24	asked if we could have a press conference in the
25	school yard. So, we held that press conference and

other members of the City Council announced that they 2 3 were going to introduce intro-what we call Intro 0800 4 because that kind of rhymes. Yeah, and here we are today back here in the Council Chamber again 5 participating in a lifelong civics lesson. In 2016, 6 7 Caesar Chavez's granddaughter Julie Chavez-Rodriguez came to our school from here job at the White House 8 9 for an interview about her grandfather and the farm worker's efforts-efforts to ban toxic pesticides and 10 11 herbicides. Many of my former students who are here, 12 came back, came to our class for that interview. 13 Many of the parents and grandparents came also, and 14 we learned a lot about the particular-about- Excuse 15 me kids. We learned about more about Julie Chavez 16 and how she and her family helped to ban the use of 17 pesticides for farm workers, and we are trying to follow the tradition of the-of Caesar Chavez's 18 19 I'm personally learning more about toxic family. 20 pesticides, and what we call Glyphosate. I hope I'm 21 pronouncing it right. I worry about my students, their families and the millions of New Yorkers who 2.2 23 picnic, play and do sports and gather in the parks and playgrounds. The signs are not always this big, 24 and don't forget babies can't read. Babies can't 25

2 read. So, signs-this is a bigger sign, but babies 3 can't read. They don't leave the soil on the ground 4 or the grass on the ground because it says we sprayed Babies can't read. I plead with you with all 5 here. my heart and soul to bring Intro 800 for a vote for 6 7 this whole City Council. You may want to make some 8 improvements there, f course. Of course, and there's 9 some fabulous testimony from the Mount Sinai Children's Environmental Health Research Department. 10 11 That's one Deon [sic] testified and a number of other 12 people from groups around the city who are here, 13 around the country actually. We hope that you will work to pass Intro 800 into law so that-so that we 14 15 can protect children and all the families who use our 16 parks, playgrounds and other public spaces of New 17 York City. Please I beg you. Listen to the 18 scientists. Please listen to the scientists and the 19 medical researchers. Please say no about it. They've 20 done research. They know what they're talking about. 21 The documents that were submitted have pages of 2.2 references about the research. This is real science. 23 We beg you to listen to the research, to listen to our children and not to companies that are going to 24 25 try-try to convince you the pesticides and herbicides

2 are just fine. They are not. So thank you. The 3 kids are going to present. I don't know you don't 4 want to hear 60 of them each speak right? So, we're going to do a production. We're going to like do a 5 little skit for you, and so let's begin. Ready. 6 7 [background comments] Okay, ready. Okay, ready? 8 STUDENTS: [in unison] Hey, we're not 9 going to let this plan go on. [sic] Hey, we want to act today. [sic] [pause] 10 11 PAULA ROGOVIN: [background comments] 12 Look. Okay ready. 13 STUDENTS: Look, those pests are right here. We've had it. They're the worst pests we've 14 15 ever had. [16 PAULA ROGOVIN/STUDENTS? Oh, no. Those 17 weeds have got to go. We'll have to spray today. 18 STUDENTS: Spray? Well, I'm not going to 19 spray. 20 PAULA ROGOVIN/STUDENTS: Oh, put some 21 pesticides and herbicides. Would you like to spray to kill the weeds? It's really great. [background 2.2 23 comments] Come on, let's spray. On this day we'll have to spray. Don't spray. No way. Why not? No, 24 25 pesticides and herbicides now stop it. Stop it.

1	COMMITTEE	ON	HEALTH
---	-----------	----	--------

2	We'll stop it. Stop it. It's not very good. It's
3	not good for you, and it's not good for us. So,
4	we're going to make some great big laws. So, let's
5	tell the lawmakers know what times it takes.

6 STUDENTS: So, lets just tell the 7 herbicides-- [background comments] Can he show you? 8 Sure, he can get it done on that. [sic]

9 PAULA ROGOVIN: And so, anyone in this room feel free to join us. Ready. Hey, hey, ho-ho, 10 11 toxic pesticides and herbicides just have to go. 12 Hey, hey, ho-ho, toxic pesticides and herbicides just 13 have to go. Hey, hey, ho-ho, toxic pesticides and 14 herbicides just have to go. Have to go. 0800. Pass 15 Intro 0800. Past 0800. Pass Intro 0800, please. 16 [Singing: This Land is Your Land] [cheers/applause] 17 [background comments]

18 COUNCIL MEMBER KALLOS: We want to thank 19 the kids from PS 290 for the best testimony we've 20 ever gotten here at the City Council. You've been so 21 great. [cheers/applause] We want to thank our 2.2 kindergarten--[background comments] teacher Paula, 23 our Principal Doreen Esposito, and all of our parents who came with her today. Most importantly the kids? 24 [applause] [background comments] We're going to-25

2	we're doing to listen and learn from a lot of
3	experts, and we're going to stick around and list to
4	the experts and ask them more questions, but we also
5	want you to go back to school, and learn even more.
6	So we want to thank you, and we'll see you back at PS
7	290.
8	FEMALE SPEAKER: Thank you, Ben.
9	PAULA ROGOVIN: Thank you Ben
10	[cheers/applause] [background comments, noise]
11	COUNCIL MEMBER KALLOS: We're going to
12	recess for ten minutes while we get everything sorted
13	out. [Recess, background noise and comments] I want
14	to thank everyone for their indulgence. We're back
15	from the brief recess. We're going to hear an
16	individual testifying on the Resolution, Dr. Deepak
17	Kapoor, from Integrated Medical Professionals before
18	we go back to testimony on the pesticides, and
19	whenever you're ready, you may begin. [pause]
20	[background comments]
21	DR. DEEPAK KAPOOR: It's what? Okay,
22	there we go. Thank you, I-it's certainly challenging
23	to follow the-the, you know, the children after
24	something like that. I recall the advice that actors
25	say. You know, never perform with children and

So, but even though this testimony is going 2 animals. 3 to be certainly not as charming, I think it is no less important. So, first I'd like to thank 4 5 Councilman Espinal for introducing the resolution recognizing September as Prostate Cancer Awareness 6 7 Month in New York City, acknowledge Chairman Johnson 8 for his leadership in this arena, and thank the 9 balance of the City Council for affording the opportunity to speak on behalf of this resolution. My 10 name is Deepak Kapoor, and I'm practicing neurologist 11 specializing the care of general urinary malignancies 12 13 including prostate cancer. I also serve as Chairman 14 and Chief Executive Officer of Integrated Medical 15 Professionals, which is the largest independent 16 urological practice in the country, as well as 17 Clinical Associate Professor of Urology at the Icon 18 School of Medicine at Mount Sinai Hospital of New 19 Our practice provides nearly 20% of the York. 20 urology services in the state of New York and nearly 1.5% of all the urology performed in the entire 21 2.2 country. We currently have 1.5 million active 23 patients in the Greater New York Metropolitan area. Our practice has 65 offices in eight counties across 24 25 the region including four out of five boroughs in New

47

2 York-in New York City. You-he's waving. Am I not speaking into the mic? Oh, waves to me. 3 I'm sorry. 4 Including four or five boroughs in New York City. We are proud to have offices in underserved areas in 5 the-in the region, and our doctors' practice at 75 of 6 7 the leading hospitals in the area including safety 8 net hospitals. Prostate cancer is particularly 9 relevant to us. Our group diagnoses and treats more prostate cancer than any other practice in the United 10 11 States. Data from the American Cancer Society shows 12 that one out of every 80 men diagnosed with prostate 13 cancer is managed by one of our physicians. Prostate cancer is the most commonly diagnosed tumor in men, 14 15 and despite advances in diagnoses in treatment, 16 remains a leading cause of cancer death nationwide. 17 This is particularly true in New York. The New York 18 State Department of Health reports that prostate 19 cancer accounts for more than a quarter of new cancer 20 diagnoses in the state, and over 10% of all cancer 21 deaths in New York. This year over 10,000 New Yorkers will be diagnosed with prostate cancer and 2.2 23 tragically, nearly 1,600 men will succumb to their disease. The real tragedy beyond that is that when 24 25 detected early prostate cancer is almost always

2 curable. The issue of prostate cancer awareness is 3 particularly relevant at this time. The controversy arose in 2012 when the United States Preventative 4 5 Service Task Force also known as the USPSTF issued what's know as the Grade D Recommendation, 6 7 recommending against prostate cancer screening for all men. This flawed one-size-fits-all 8 9 recommendation was issued by a panel that did not include a single healthcare profession that it 10 11 treated-ever treated a man with prostate cancer. Ιt 12 ignored known risk factors including family history 13 of disease, environmental toxin exposure such as our 14 veterans who have been exposed to Agent Orange, and 15 the fact that men of African-American descent are 16 diagnosed and die from prostate cancer at a much 17 higher rate than other races. The panel also 18 overlooked the most salient point. The most common 19 symptom of prostate cancer is no symptoms at all. 20 So, if you do not proactively look for this disease, 21 it's impossible to find in its early most curable form. When the USPSTF issued its recommendation, 2.2 23 urologists nationwide, myself included, warned about the possible public health repercussions that could 24 ensue. Our fears have materialized and much sooner 25

2 than we had thought. In the few years since the 3 recommendation was issued, we had screened fewer men 4 and diagnosed fewer men with prostate cancer. Particularly alarming is that there's been a 5 significant migration at the time of diagnosis to 6 7 more aggressive higher stage disease that is far 8 more-far more dangerous and much less treatable than 9 when the disease is found early. Over the last five years, since the USPSTF, there's been nationwide 10 11 recog-recognition that we have a continued obligation 12 to educate our citizens about the importance of early 13 detection of prostate cancer. While prostate cancer 14 affects men 365 days a year, nationally these 15 education efforts center around two days: Father's 16 Day and September, which was designated by President 17 Proclamation to be the Prostate Cancer Awareness 18 Month in 2003. All over the country patient advocacy 19 groups hold free screenings, charity events and 20 educational programs to raise awareness about 21 prostate cancer. The private sector in New York is 2.2 not lagging in these efforts. Our practice has been 23 proud to be at the forefront of these efforts partnering with industry and a variety of sports 24 franchises to continue to inform men and their loved 25

2 ones about the facts around prostate cancer. You've 3 probably seen information on prostate cancer on the 4 Nasdaq in Times Square. You may have heard interviews or seen them on television regarding 5 prostate cancer awareness, and if you walk by Park 6 Avenue at night this month, you may have seen that 7 8 the Helmsley Building is illuminated in blue, which is the color worn to express solidarity from men 9 stricken with this disease. Fortunately, earlier 10 11 this year the USTSTF provides its recommendation and 12 recognized the role that prostate cancer screening in men 55 to 70 and acknowledge the need for counseling 13 14 high risk populations about the potential value of 15 screening. This presents us with a unique opportunity to reverse the negative trend of the last 16 17 five years, and reaffirm the importance of early 18 detection of prostate cancer. Regrettably, the 19 reversal of this-the recommendation did not receive 20 nearly the media exposure that the original recommendation received in 2012. We have an 21 2.2 obligation to address the knowledge gap many men face 23 regarding this disease, and overcome years of flawed advice. This resolution is consistent with the most 24 current scientific data, and will raise awareness 25

regarding the-regarding this potentially life 2 3 threatening disease. On behalf of the thousands of 4 New Yorkers whose lives are affected by prostate cancer, I strongly urge the City Council to adopt 5 this resolution thereby definitively expressing its 6 7 support for men's health and codifying the commitment 8 already displayed by healthcare providers, patient 9 advocacy-patient advocacy groups, and other in their support of men stricken with this disease. 10 I thank 11 you for your time. I'd be happy to take any 12 questions that you might have.

13 COUNCIL MEMBER KALLOS: I think you gave great testimony. I'm impressed by the magnitude of 14 15 your practice and all the folks that you're helping, and thank you for your efforts. I hope to get this 16 17 resolution passed swiftly, and it is-it is perhaps 18 overdue considering that we are in September, and it should have hopefully been passed prior. So, I want 19 20 to thank. We'll-we'll excuse you and we are going 21 to hold on the next panel. I'm going to go next 2.2 door. I'm going to vote in the Land Use Committee in 23 which I serve, and then we will come back again in about five to ten minutes. Thank you. 24

52

2	DR. DEEPAK KAPOOR: Thank you.
3	[background comments, pause] I want to thank
4	everyone for their patience and allowing me to be in
5	two places at one time. It's one of my skillsets. I
6	want to invite from Mount Sinai, Children's
7	Environmental Health Center, Dr. Sarah Evans, and
8	Christopher Uler, as well as Judith Rice, Science and
9	NYC Sierra Club, and Virginia Rauh from the
10	Scientific Community. Sure, would-would you? We-we
11	have a second panel. We are going to do one on-
12	[pause]. [background comments, pause] It's Dr.
13	Hoepner, I presume? If you can join the panel.
14	Please begin when you wish. There's a-a chair
15	available. [background comments, pause]
16	SARAH EVANS: Is there a particular order
17	in which we should speak? I'll go ahead and start
18	[laughs] I'm Sarah Evans. I want to thank the
19	Council members for allowing us to speak today in
20	support of Intro 0800. I'm here on behalf of the
21	Children's Environmental Health Center at the Icahn
22	School of Medicine at Mount Sinai. We're a
23	collective of physicians and researchers who study
24	the impacts of environmental exposures on children.
25	I have a doctorate in neuro science and my background

2 is in studying how environment exposures affect brain 3 development, and I also have a Masters in Public 4 Health. So, I first want to applaud the City Council for the implementation of Local Law 37, which has 5 reduced the use the of some synthetic chemicals 6 throughout the city, but I just want to cite some 7 8 numbers that were reported by DOH for the Year 2015 9 in terms of pesticide use. So, pesticides were applied 137,234 times, which is a total of 5,656 10 11 gallons and 97,061 pounds of potentially harmful 12 chemicals that were applied to city parks and 13 property. So, we feel that Intro 0800 will further protect the youngest members of New York City. And 14 15 so, I just want to take a couple minutes talk about 16 why children are uniquely vulnerable to the health 17 effects of pesticide exposure. So, children, as you 18 know, are much close to the ground than we are. 19 Pound for pound they breathe more air than we do, 20 which makes them susceptible to exposures from 21 inhalation. They also, as you know, put their hands 2.2 in their mouths, which is just a normal behavior. Ι 23 have two-year-old twins. So, I was struck by, you know, this idea that that children can't read. 24 They 25 also don't listen. So, even if they could read, I

have a hard time keeping their hands out of their 2 mouths, and keeping them from rolling around in the 3 4 dirt, and so on. And we also experience 5 unintentional exposures when track dirt in on our shoes, or through roller strollers and such. And so, 6 7 every other year the Center for Disease Control and 8 prevention conducts a study called the National 9 Health and Nutrition Examination Survey, where the measure the levels of various chemicals and urine and 10 11 blood of a representative sample of the population, 12 and what they find is that children ages 6 to 11 13 actually have higher exposures to pesticides than 14 adults do, and we believe that that's for the reasons 15 that I've just described because of their normal 16 behaviors and their normal body physiology, and we 17 also have difficulty detoxifying their bodies and 18 getting rid of some of those chemicals, and they have 19 more futures and years of life to be exposed to those 20 chemicals. So, for these reasons, we're particularly 21 concerned about children's exposures. We're also 2.2 concerned about exposures that pregnant women 23 experience and the vulnerability of the fetus, and so there are some very recent studies showing that 24 exposures to pesticides during pregnancy either 25

reported by the mom in terms of what she used during 2 3 pregnancy or relative to proximity for example to an 4 agricultural area associated with increased development disorders, learning disabilities. 5 Most recently a study came out just this month associating 6 7 pesticides with an increased risk of autism in some 8 women as well as childhood cancers. And so, these 9 have been well documented. Dr. Rauh may speak a little more to the health effects on children and 10 11 some of her studies. I just want to talk a little 12 bit about the cosmetic use of pesticides. So, you 13 know, we know that there are public heath threats 14 that sometimes require emergencies of certain 15 chemicals, but one of the biggest concerns that we 16 have that we'd like to highlight is the use of 17 cosmetic pesticides throughout the city. So, these 18 are things like Glyphosate, the active ingredient in 19 That's the most heavily used herbicide in Roundup. 20 New York City, and it was classified by the 21 International Agency for Research on Cancer, which is 2.2 the cancer research arm of the World Health 23 Organization as a probable human carcinogenic, and just this past summer it was also added to the 24 California Proposition 65 list, again for it's 25

2 potential ability to cause cancer. A lot of those 3 studies are laboratory studies are laboratory studies or occupational studies. People have not yet studied 4 the effects of Glyphosate exposure and other 5 herbicides on children. So, children tend to be sort 6 7 of an under studied population, but as I said, we know that they're most vulnerable to chemical insults 8 9 early in life. We're also concerned about some of the in-water-so called inactive or inert ingredients 10 11 in pesticides. So, we may be focused on the active ingredients, but there are studies that show that 12 13 synergists and other compounds, which aren't 14 necessarily listed on the label, and are very much 15 understudied are equally if not more toxic than the 16 active ingredients. So, importantly, I just want to 17 stress that pesticide exposures can be prevented, and 18 the health effects of pesticide exposures on children 19 can be prevent. So, municipalities across the 20 country and in other countries have instituted 21 cosmetic pesticides bans or more broad pesticides 2.2 bans, and I just to highlight what has happened in 23 Toronto where a ban on pesticides that, actually I think is largely voluntary, has led to an 80% in 24 pesticide chemicals detected in streams and other 25

2	waterways. So, by implementing legislation like
3	0800, you can very effectively I think reduce the
4	potential exposures and harms. So, I just want to
5	close by saying that we-we know that children are at
6	risk from these exposures throughout the city and the
7	parks and the places where they learn, and where they
8	play, and so, again, we urge you to take steps to
9	support Intro 0800 and other legislation like it to
10	further reduce potentially harmful exposures in the
11	children of New York City. We are available to
12	answer any questions that you might have. Thank you.
13	Good morning. I'm speaking as a
14	scientist, and I am Dr. Virginia Rauh. I work at the
15	Mailman School of Public Health at Columbia
16	University, and I have a doctorate in epidemiology
17	from Harvard University. I'm the author of more than
18	100 scientific papers in this area, and also a member
19	of Domestic U.S. Studies on the Impact of Pesticides
20	and Insecticides on Children's Neuro Development. At
21	Columbia we have a Children's Center for
22	Environmental Health, and I function as the Director
23	Neuro Development. So, I'm not going to be charming,
24	although I wanted to-I was impressed that the kids
25	were rhyming everything they said. The only thing I

could think of saying was I might be alarming. 2 Ι 3 think that the area of pesticides and insecticides is 4 a very important area right now. There are over 5,000 synthetic chemicals that are introduced 5 annually. Probably 25% are potentially neuro toxic. 6 7 There is no way that the regulatory agencies in this country can vet all those chemicals and assure that 8 9 they're safe. So, we have to be extremely careful what we use. My particular area are the 10 11 organophosphate insecticides, which are perhaps the 12 most wide spread used in agricultural settings. 13 They're used on golf course. They're used on medians 14 to control insects including termites. They are used 15 in turkey farms, chicken farms, all kinds of locations, park, Christmas tree farms, all kinds of 16 17 very widely-widely used areas where there are lots of 18 kids and families. What specifically do these 19 insecticides do? In the case of chlorpyrifos, which 20 is the insecticide, which I've studied most 21 extensively, we have extremely good evidence that these pesticides, insecticides are associated with 2.2 23 long-term potentially irreversible brain damage. We've looked at parts of the brain as much as 12 24 years after prenatal exposure suggesting that these 25

parts of the brain are significantly smaller than 2 3 they ought to be or in some cases have aberrant 4 shapes. The way the insecticides works is to harm the developing brain. So, there are anomalies 5 associated with cell differentiation, cell migration 6 7 and ultimately the connections between the neurons. 8 We've noted in these children the long-term effects 9 also include some cognitive effects in the areas of working memory, and various other cognitive skills, 10 11 which will affect school success and ultimately 12 perhaps long-term success in the workplace. We think 13 that these chemicals are in credibly dangerous based 14 on evidence suggesting cortical thinning. This means 15 that there are parts of the cortex, which we have looked at by magnetic resonance imaging, which is a 16 17 relative non-invasive way of taking a look at the 18 brain in children and adults. We have noted that the 19 cortex in many places is significantly thinner among 20 those children who have been highly exposed. Perhaps 21 most alarming is the persistence of these effects, 2.2 including tremor. We're aware that among adults who 23 are exposed to chlorpyrifos, there is a direct link to Parkinson's disease. We're now trying to 24 25 determine if that could also an important risk in

2	intercity kids who may be exposed in other ways. I'd
3	like to conclude by simply saying that this is an
4	extremely alarming chemical. I think that in general
5	it's-it's very encouraging to see folks trying to
6	push forward legislation to regulate. In terms of
7	federal regulation, the Environmental Protection
8	Agency is strictly a regulatory agency and, of
9	course, is shaped the political whims. At the moment
10	the Environmental Protection Agency is not moving
11	forward to ban the chlorpyrifos, and we would
12	certainly like to see that happen.
13	JUDITH WEISS: [off mic] Good morning.
14	[on mic] Good morning. My name is Judith Weiss.
15	I'm a Professor Emerita at Rutgers University. I
16	have studied environmental toxicology, and published

17 about 100 papers in the field of environmental toxicology. I want to focus my remarks today on 18 19 Glyphosate, which is the main ingredient in Roundup. 20 Glyphosate and some other chemicals have some very unexpected effects on animals. Most poisons--if you 21 22 look on page 3 of my testimony-most poisons have a 23 dose response where as you increase the dose the response goes up. That's sort of logical. It makes 24 25 sense. There's a class of effects that only really

2 came to light less than 30 years ago, which is a 3 group of effects called endocrine disruption, and 4 chemicals that do that are referred to as endocrine disrupting chemicals, and these have a very bizarre 5 and unexpected kind of effects, and you can see that 6 7 on the lower graph where you've got on the right side 8 the sort of normal thing as doses go up, and then as 9 you get below the point where you have no effect, you then go lower and lower and you see an inverted U 10 11 shape of an endocrine effect at really, really low 12 So that you have that effect at these really doses. 13 low does and then it's gone at high doses. So, when this was first found, it was not believed because it 14 15 was totally different from the usual expectation that 16 the bigger the dose, the bigger the response. Here 17 you have a response at the low dose, and it's gone 18 higher up. It's very bizarre. It took a great deal 19 of research before this got accept as real phenomenon 20 because it was so totally bizarre. Getting back-so 21 that's what endocrine disruption is. It's exceptional and very different from other kinds of responses. 2.2 23 Glyphosate is an endocrine disruptor. Most endocrine disruptors will affect one hormone perhaps the 24 estrogens, the female hormones or the androgens, the 25

2 male hormones, testosterone or the thyroid, but 3 Glyphosate seems to have effect on both the male and 4 female hormones, which is another sort of unusual thing, and there have been many studies, and I'm 5 citing a few of them in this paper on rats and mice 6 7 and so forth where exposure of pregnant animals 8 disturbs the growth and maturation of the sons of the 9 male offspring where the appearance of the cells in the testes are abnormal and the endocrine production 10 11 is abnormal. Exposure of juvenile rats, juvenile 12 male rats before puberty changed what happened in 13 puberty such that the mice-the rats in this case-14 produced less testosterone and the structure of the 15 tissue in the testes was abnormal also. So, this is a trend that has been seen in numerous studies. 16 Not 17 a trend, a finding that has been seen in-in numerous 18 studies. There was also a study of-on rats 19 indicating there was a change in mammary tumors. Ι 20 think the data on cancer production of Glyphosate 21 it's becoming more clear, but it's not as clear in my 2.2 mind as the endocrine disruption effect, but cancer 23 is probably-it is probably a cancer causing chemical as well. Since you can't do studies on people, the 24 studies on humans have been done on human cell lines 25

2 and tissue culture, and in human cell lines, liver 3 cells it inhibited action of androgens that is the 4 male hormones at very low levels, and when you went 5 to higher levels, you didn't see that, but you saw the standard thing of cell death, problems with-with 6 7 cell division and cell death, and these other things 8 at the higher doses that would be represented in-in 9 the-the second phase here. The higher doses are doing sort of standard toxicological things, and then 10 11 when you get down to the really lower dose, you're 12 getting that endocrine effect. I'm not going to go 13 on, but there are many, many more studies that I 14 could cite. Let me just repeat what others have 15 said. It's the littlest kids that are going to be 16 the most exposed. I'm thinking of babies, toddlers, 17 and so it's quite understandable. I also am 18 concerned since a lot of my work is mostly not on My work is focused on aquatic animals. 19 mammals. 20 These chemicals will wash off into the lakes and 21 ponds, and affect the fish or the turtles and the 2.2 other animals living in the ponds. Also, the wild 23 life on land such as squirrels and people's pet dogs. That will also be exposed to these chemicals. So, I-24 I wouldn't advocate necessarily a total banning of 25

2 all chemical herbicides, but I think there are some 3 that are much worse than others, and I put Glyphosate 4 up on the top ranking of really hazardous bad 5 chemicals. So, thank you for your attention.

LORI HOEPNER: Good afternoon, Council 6 7 Member Kallos and member of the Committee on Health 8 (laughs). My name is Dr. Lori Hoepner. I'm a 9 colleague of Dr. Rauh's for nearly 20 years at Columbia Center for Children's Environmental Health. 10 11 I'm also an Assistant Professor of Environmental and Occupational Health Sciences at the CUNY Downstate 12 School for Public-School of Public Health. My DRPH 13 is in Environmental Health Sciences from Columbia 14 15 University. My MPH is Maternal and Child Health from 16 Tulane University School of Public Health and 17 Tropical Medicine, and I come here today to speak not 18 only as an environmental health expert with over 50 19 co-authored publications on the effects of 20 environmental exposures on children, but also as a 21 private citizen, a New York native born Brooklyn resident, and mother of two children, one of whom 2.2 23 attends public school in Council Member Eugene's district. Children are the most vulnerable not just 24 simply due to the effect of body burden and mode of 25

exposure, their bodies are small and exposure to 2 3 pesticide is large in comparison to an adult. In 4 particular, major public health concerns of repeated exposures to pesticides and the problem of exposure 5 That is exposure to more than one 6 mixtures. 7 pesticide and/or chemicals simultaneously and over 8 In terms of mode of exposure, anyone who has time. 9 ever watched a toddler or a young child has seen them stick their hands and other objects in their mouths 10 11 repeatedly with out any concern for exposure to a 12 variety of unpleasantness. Pesticides in many cases 13 are persistent chemicals, some with unpleasant 14 histories. For instance chlorpyrifos, which Dr. 15 Rauh had mentioned is a pesticide, which was banned 16 for residential use by the EPA, but is still 17 permitted for agricultural and commercial use 18 including in New York State. The original iteration 19 of the chemical formulation for chlorpyrifos was 20 nerve gas, which was used in World War II. That is 21 just one example. One a pesticide is sprayed on a 2.2 lawn in Central Park, Prospect Park and Cortlandt 23 Park, Flushing Meadow Park, Silver Lake Park, or any other green space, our wonderful city has to offer 24 children to roam free with grass under their feet 25

2 that pesticide does not disappear when a pesticide 3 application warning signs are removed, and as a 4 reminder warning signs tend to be about an 8 x 11 5 size piece of paper in English and illegible to anyone who doesn't have literacy such as a child or 6 7 someone who doesn't read English. The issue of 8 pesticide exposure sticks with me because I sticks to 9 my children, and every day that we delay action, another child is exposed. We-we support your 10 11 (laughs) and Council Member Rosenthal's proposal to 12 amend Section 17-1203 the Administrative Code 13 prohibiting the use of chemically based pesticides on 14 property owned or leased by New York City. Thank 15 you.

16 COUNCIL MEMBER KALLOS: In your testimony 17 introduce and I-a-a concept that I think was a little 18 bit missing from the previous dialogue around a 19 cosmetic pesticide. So, in the city's testimony they 20 spoke about the health effects of it. They don't use chemicals. What are-what are the health effects that 21 2.2 they do not use cosmetic pesticides and if you can 23 elaborate on that a little more.

24 LORI HOEPNER: So, I kind of wanted to 25 distinguish between for example some of the

67

pesticides, and I think they are moving a little bit 2 3 away from the organa phosphate pesticides, but 4 they're still permitted for use in the city, which is a problem, which I wrote into my written testimony, 5 and I'm-I'm glad that that was addressed. But, I 6 know that there are--always go into the exemptions to 7 8 the Local Laws that govern which pesticides can be For example, in an emergency situation. 9 used. So, we saw the Zika outbreak the past couple of summers. 10 11 Not here thankfully, but the city did have to ramp up 12 measures and have in their arsenal certain chemicals, 13 which can be used to target adult mosquitoes. And so that is not necessarily a cosmetic use of a 14 15 pesticide. That's pesticides used in response to a 16 potential public health threat. When we talk about 17 the use of herbicides like Glyphosate--Glyphosate 18 like 24-D, which is a part of agent-agent orange as 19 well, and a neurotoxin, to eliminate weeds in the 20 parks. Then, I think we're really talking about a 21 cosmetic use. So, the agencies may defer without 2.2 opinion and say that it's-it is not just being used 23 for cosmetic purposes, but generally the elimination of weds and the creation of this beautiful green 24 uniform lawn is thought to be a cosmetic use of a 25

2	pesticide. So, I think it's important to make that
3	distinction, and think about whether we need to get
4	rid of all the weeds in our parks with these toxic
5	chemicals, and why not just let them be a little
6	weedy or use other methods and IPM. I'm not sure how
7	it's done or the city has explored other methods for
8	weed elimination that would reduce the use of
9	cosmetic herbicides and pesticides.
10	COUNCIL MEMBER KALLOS: Now, the-the-our
11	last panel or our panel-our panelist on the-at the
12	end of the table indicated that you were in favor
13	banning Glyphosate, but were not necessarily in terms
14	of what the legislation's broader goal of banning the
15	synthetic pesticides with a special window were
16	biological and natural alternatives. Sometimes you-
17	sometimes you have a machete, sometimes you have a
18	scalpel. The goal is trying to get to it. Do you
19	have-do you have specific concerns about the-the
20	broader ban, or specific changes?
21	DR. VIRGINIA RAUH: I—I was just
22	responding to what the-the horticultural specialist
23	said and what the Health Department in terms of a
24	total ban on all chemicals would make their job
25	extremely difficult, and I was just-I am not familiar

69

2	with the whole suite of herbicides. I was just
3	hoping there might be some available that were, you
4	know, relatively benign. I don't-I can't name any.
5	I don't know, but I would hope that the-the city
6	would do research into seeing if there were indeed
7	some herbicides that seem to be pretty benign that
8	would be a supplement to their use of biological
9	pesticides as the main thing to do. Just-just trying
10	to enable them to do their job without too much
11	trouble, but I can't recommend any particular
12	chemical that might fit that bill.
13	COUNCIL MEMBER KALLOS: The-we've-we've
14	spent a lot of time talking about Glyphosate. Are
15	there other specific similar cosmetic or other
16	pesticides that any of you on this panel have
17	specific concerns on based on the Local Law 37
18	reports that the city may be using in excess or not
19	necessarily needing to use?
20	DR. VIRGINIA RAUH: I think that the
21	organic phosphate insecticide for fire or
22	Chlorpyrifos would fall in that category.
23	COUNCIL MEMBER KALLOS: And to Dr.
24	Hoepner just a quick question around the signage.
25	So, in your experience you've-you've seen that there

2 is the spraying of pesticides. The signage comes 3 down, and so I guess the question is in your expert 4 opinion doe-do the impacts and effects of the pesticides outlast the signage rules? Does our 5 legislation need to expand signage requirements to 6 say no, once you spray it has to go off for whatever 7 8 the clinical language for the life of that pesticide 9 remaining in that area? Do we need to make sure that there's an open data set so that folks can have an 10 11 app for that, and then also perhaps even add saying 12 that it can't be an $8-1/s \times 11$. It has to be legible 13 at all intersections, and it needs to be available in the seven or nine spoken languages in that specific 14 15 area, but I'll throw it to you. But that's just me 16 ripping on what I heard.

17 SARAH EVANS: Okay. Well, I'm a strong 18 believer in health communication and health literacy 19 and in terms of the signage, we have a few questions. 20 In terms of the signage, it the MTA can do it, I 21 think that New York City Parks and Recreation, the 2.2 Central Park Conservancy, whoever it is that would be 23 responsible for putting those signs up can do it as well. Visuals are a huge aid. We live in a visual 24 25 society now. Icons and graphics are very important,

71

2	color and multiple languages. Again, if the MTA can
3	do it, we can do it here, too, in terms of various
4	languages and color and graphics. And as far as the
5	timing of exposure and how long that lasts or how
6	long the chemical will lay deposited on the surfaces,
7	it really depends on the chemical. So, it's-so,
8	that's a hard question to answer generally, but in
9	general yes. They tend to outlast especially if
10	there are pesticides that are petroleum based.
11	Petroleum based products are oily. They don't wash
12	off easily, and then other chemicals, which are the
13	persistence, of course. The concern is the
14	persistence in the body over repeated exposures. So,
15	if a child goes into a playground, into a park, or
16	any human, any—any animal goes into a park multiple
17	times, they have repeated exposure potentially and
18	the-the effects are-were-this is something that
19	everybody sitting at this table continues to study as
20	well as many other experts in the field. So, these
21	are-these are difficult questions to answer, but if
22	there is perhaps signage, or as you suggested an app,
23	of course, we-that also speaks to environmental
24	justice and whether everybody has a cell phone
25	available to them or access to the Internet, or WiFi-

2	if we have WiFi in the parks that would be wonderful.			
3	So, ways to get that message out. Perhaps PSAs. I			
4	mean there's a plethora of options out there that			
5	could work, but I-I strongly believe that notifying			
6	people and keeping them constantly informed. People			
7	are human. They start to ignore the signs, right. So			
8	even if you keep a sign up in perpetuum-in			
9	perpetuity, they might start ignoring them. So, just			
10	perhaps different ways to signal people over time.			
11	COUNCIL MEMBER KALLOS: And-and so just			
12	asking and your other hat as-as a parent. So, you			
13	wake up early, the kids are running around the house.			
14	Okay, we're going to take them to the park. If you			
15	can share-if-if for the parents on the panel, and I			
16	want to apologize. We-we're-I introduced legislation			
17	that would allow there to be child care at these			
18	hearings so it wouldn't cost you money to come. You			
19	could actually have your kids looked after in a			
20	similar fashion as we just had several dozens and			
21	dozens looked after. But I—I guess if you can talk			
22	to the ordeal that it is going through to get your			
23	kids to the park, and what would happen even among			
24	sophisticated folks if you get there and like they			
25	are there to play on the-on the grass and play in the			
ļ				

73

2 park, but there's a sign that says we sprayed 3 pesticides, and what even the most educated among us 4 would do in the type of choice and what ends up 5 happening?

SARAH EVANS: [laughter] Sometimes we let 6 7 them play, and we wash their hands very carefully, 8 and we don't eat when we're in those spaces, but we--9 Typically, we would look for a different space when we see that yellow sign or the signage posted. 10 Ι 11 also want to give a plug for the importance of 12 outdoor play in green spaces. So, we feel very 13 passionately that children should be outdoors. So, 14 there's a balance between really scaring families 15 away from the parks as well and telling them this is 16 toxic. Don't go here because it's beneficial for 17 their kids to be outside and exposed to green spaces. 18 So, we have to be a little bit careful about that, 19 and like I said, I have twins, and they're two. 20 [laughs] So, sometimes they really, really need to 21 be outside and-and run free, and I-I'm nervous, but I 2.2 want to let them play. So, it's a real conflict for 23 families.

24 LORI HOEPNER: I agree. I will readily 25 admit that my 12-year-old son among his first words

was chemical, and her learned not to go under the 2 3 kitchen sink very quickly, but I-but the-we-I think 4 all of us again could go on for hours about all of the exposures that our children are-are experiencing 5 in the city, and-and across the country. 6 So 7 pesticides are not the only question, and as I 8 mentioned with repeated exposures and multiple 9 exposures, they're not the only exposure that children have. So, I agree that it's not necessary 10 11 to scare people away from parks, but also if I do see 12 anything about pesticides that have been sprayed or 13 if there's a treated lawn, my-my children will not be playing on it. Often in Prospect Park, which is 14 15 where we tend to go, it's often fenced off. So, that helps to keep them away, but again, you-you have to 16 17 choose your exposures wisely and be cognizant and I 18 think the idea of health education, environmental 19 health education comes strongly into play here. 20 Giving people-empowering people with the knowledge 21 is-is really the end game, and-and then they can choose what they do with that knowledge, but it-it 2.2 23 behooves the-the City Council, it behooves the city to-to give-to help people understanding what is being 24 applied to the public green space. 25

2 COUNCIL MEMBER KALLOS: It also sounds 3 like it behooves the city as a large market after the 4 several billion budget that is spending a lot on this to study the impacts and effects of the different 5 products to compare the chemical and bio side and 6 7 other items to see what alternatives we can use, and we'll make sure to take a look at both of the 8 9 chemicals. I have one last question for this panel for-for Dr. Rauh. Just this is a little off topic. 10 11 So, the-the administration led by the Mayor wants to 12 build a garbage dump in a park on the East River on 91st Street in my district. They've given me a 13 packet this thick of all the pesticides and chemicals 14 15 they want to use there, and one the questions that we 16 had, but we lacked the expertise, but I think we have 17 it here, was what the risk was of that exposure from 18 the-from whether or not it would permeate out of the 19 building, whether or not it might fall into the East 20 River. If it does fall into the East River, what its 21 impacts would be on the local wildlife and fish life, 2.2 the aquatic life on the East River particularly, and 23 then given the-the high rates of currents and flow, how broadly that would have an impact on the larger 24 25 ecosystem of the Tristate area, but not necessarily

1	COMMITTEE ON HEALTH 77
2	for here, but if you don't mind touching base with me
3	after the hearing, it's <u>bkallo@benkallos.com</u> .
4	DR. VIRGINIA RAUH: Okay.
5	COUNCIL MEMBER KALLOS: SO, I will
6	DR. VIRGINIA RAUH: [interposing] I would
7	just say I'm familiar with the former garbage dumps
8	in Staten Island at Fresh Kills, which was the
9	tallest-largest one in the whole metropolitan area,
10	and it was closed, and it's being turned into a very
11	lovely park now. And so it is possible to
12	rehabilitate these things but, of course, I
13	understand that you don't want one in your
14	neighborhood. We'll talk later.
15	COUNCIL MEMBER KALLOS: Okay, fair
16	enough. I'd like to excuse this very distinguished
17	panel. Look forward to working with you. Thank you,
18	and may I also ask if you will come to other schools
19	in my district to talk to them including possibly
20	coming back to PS 290, but I want to thank you, and
21	I'll excuse you. Our next panel we Eric Weltman from
22	Food and Water Watch who is one of my frequent
23	collaborators and partners in making not trouble, but
24	trying to heal our world. Jordan Christensen from
25	the Citizen's Campaign for the Environment, and then

2	I have Eric Fleisher, Deborah Cohen and Nicole
3	Menchero. If you wish to testify, and you haven't
4	had a chance, please make sure to fill one of these
5	out. This is what we believe is our last panel for
6	the day. So, if you did not get called, make sure to
7	fill out one of the forms, and hand it to one of the
8	two sergeants-at-arms as quickly as possible.
9	[pause] And we will not run the clock, but I've been
10	advised by committee counsel that there's another
11	hearing here at 1:00. So, if-if we can be courteous
12	to them, but thank you. I think everyone has been
13	pretty great, and just whoever wishes to go first,
14	feel free to do so. [pause]
15	ERIC WELTMAN: My name is-again, my name
16	is Eric Weltman I'm a Brooklyn based organizer with
17	Food and Water Watch. Our mission is to resist- Oh,
18	is that the Chairman. Oh, anyway—our mission is to
19	resist corporate control and abuse of our most vital
20	resources, and ensure that government fulfills its
21	obligation to protect public health and the
22	environment. We're grateful for the opportunity,
23	Chairman Johnson as well as the Council Member Kallos
24	to testify in support of Intro 800, and have
25	submitted more extensive written testimony. In the
25	submitted more extensive written testimony. In the

midst of Donald Trump's assault on the environment, 2 3 including attempting to slash the EPA's budget, it's 4 all the more essential that the Council step up its leadership in protecting New York City from toxic 5 pesticides. In doing so, of course, you'll be taking 6 7 on Monsanto, one of the world's most powerful corporations and marketer of Roundup. Fortunately, 8 9 you have both science and the people on your side. There are safer alternatives to cancer causing toxic 10 11 chemicals to maintain our parks, and other public 12 facilities. On behalf of Food and Water Watch, and 13 on behalf of my ten-year-old son Zach, I urge the 14 committee to approve and the Council to pass this 15 important bill. Thank you. 16 CHAIRPERSON JOHNSON: Thank you very 17 much. 18 JORDAN CHRISTENSEN: Hi. Is this working? 19 Hello, my name is Jordan Christensen. I'm the 20 Citizens' Campaign for the Environment. So, CCE works to reduce the use of toxic pesticides in public 21 spaces, and we strongly advocated for the Child Safe 2.2 23 Playing Fields Act, which bans the use of aesthetic or as we-we were saying during the last panel, 24 cosmetic pesticides on school grounds throughout the 25

2 state, and we also work with Suffolk County to phase 3 out the use of pesticides on county owned property, 4 and we're here to strongly support the bill before you to day. So, a growing body of scientific 5 research has linked exposure of pesticides to certain 6 7 cancers including Non-Hodgkins Lymphoma, as well as 8 damage to neurological, respiratory, immune and 9 endocrine system. Of the 30 most commonly used lawn chemicals in the U.S., one of which is Glyphosate, 25 10 11 are linked to kidney damage; 21 are linked to 12 reproductive health impacts; and 17 are known or 13 possible carcinogens. Once these pesticides are 14 applied, they often enter our local surface 15 waterways, and the application allows for direct 16 exposure to humans and wildlife. As we already 17 discussed, children are particularly vulnerable to 18 these toxins. Researchers have found that pesticide 19 exposure can induce or exacerbate asthma, which is 20 the leading cause of school absenteeism, and accounts 21 for 14 million lost days of school annually in the 2.2 U.S. We know that there are proven safe and cost-23 effective alternatives to these pesticides. There's no reason to continue allowing the public to be 24 exposed to harmful pesticides in our parks and green 25

So, to reduce the use of pesticides, dozens 2 spaces. 3 of municipalities around the country have chosen to 4 ban pesticide use on public property, and in 1999, we worked with Suffolk County to pass similar 5 legislation to New York City's Local Law 34 in 6 7 Suffolk in order to phase out pesticides throughout 8 the county, and we actually remain an active member 9 of the Pesticide Phase-Out Committee. It's been about 16 years now, and we worked to help identify 10 11 biological and organic alternatives to be used on 12 county property including helping to phase out the 13 use of Glyphosate pretty heavily. Following the 14 lessons learned from Suffolk, one recommendation that we'd like to offer for the Council is to create a 15 16 community advisory committee as part of New York 17 City's legislation. With all the-it should include 18 public health and environmental stakeholders instead 19 of just agency folks, and it would have the power to 20 grant a one-year exemption on a case-by-case basis. 21 So, this would ensure that in emergencies or specific public health issues, termite outbreaks or even 2.2 23 things like poison ivy in a park, these issues can be addressed swiftly, but the CCE can also monitor and 24 track the situation. It can allow for the use of 25

pesticides when other alternatives have failed, and 2 3 we provided updates for most of the agencies on 4 progress and setbacks. So, you can further explore some non-toxic methodologies and pilot projects. 5 Implementation of this legislation is not without 6 7 challenges. We've already heard from the Parks 8 Department. We know that are seriously public health 9 issues that can arise where pesticides could be So, creating a CAC with community 10 needed. 11 involvement of an oversight board would help ensure 12 that the least harmful treatment options are chosen 13 on a regular basis. So, again, thank you so much for the opportunity to speak, and we urge the committee 14 15 to please pass the 0800. 16 CHAIRPERSON JOHNSON: Thank you very 17 much. [pause] 18 DEBORAH COHEN: Good afternoon. My name 19 is Deborah Cohen. I'm the mother of two, and have 20 lived in New York City for over two decades. I've 21 never thought much about the chemicals used in our 2.2 parks, but thanks to the students at PS 290, I have 23 experienced an awakening, and I did a little research of my own. When it comes to Glyphosate, a key 24 chemical routinely sprayed in our public spaces, 25

2 controversy abounds. It seems cherry picked industry 3 funded research and unpublished data have informed 4 recent European and U.S. regulatory bodies evaluations downplaying the carcinogenic risk of 5 Glyphosate. As a layperson, there is only one way I 6 7 can make sense of it. I request this body to approve 8 the bill to ban certain pesticides from use in our 9 city. I also ask this body to apply the precautionary principle to its decision making. 10 This 11 principle demands taking action to protect citizens 12 against potential risk in the face of scientific 13 uncertainty. Even with the controversy around data, 14 there is a lot we know. We know that what is sprayed 15 on the ground has the potential to be in the ground 16 for a long time. For example, despite being banned 17 in 1972, DDT is still found in foods in our supply 18 chain as well as infant cord blood passed from mother 19 to child. We know studies have shown a statistically 20 increased risk in certain illness in individuals 21 exposed to Glyphosate compared to those not exposed. We also know that toxic surfactants added to 2.2 23 Glyphosate based products make them much more toxic. Last year European member states voted to ban the 24 surfactant Polyethoxylated tallow amine from Gly--25

2	Glyphosate based products. This surfactant is		
3	allowed as an inert, an essentially unregulated		
4	ingredient in the formation of Roundup used in the		
5	U.S. We count on our government officials to keep		
6	us. We know enough to know we don't have definitive		
7	proof of safety. My 10-year-old was going to come		
8	today to testify, but he decided he needed to be in		
9	school. [laughs] But in his-I'll read the final line		
10	of his prepared statement.		
11	CHAIRPERSON JOHNSON: Sure. Go ahead.		
12	DEBORAH COHEN: I don't like weed killers		
13	because they have chemicals in them. I don't need		
14	perfect looking grass where I play, but I do need		
15	safe grass. Thank you for your consideration.		
16	[applause]		
17	CHAIRPERSON JOHNSON: Thank you very		
18	much. [pause]		
19	ERIC FLEISHER: Test. I'm Eric T.		
20	Fleisher. I'm a practitioner. I'm an environmental		
21	restoration specialist with 35 years of experience in		
22	organic land stewardship. I started as Director of		
23	Horticulture for Battery Park City Parks, which is		
24	close to here in 1989, which I worked that until		
25	2016, and during that time, over 27 years I developed		
ļ			

84

a program there, which completely 100% maintains that 2 3 park system organically. What does that mean? Well, 4 it means that we do not use any toxic pesticides, herbicides, fungicides and also drastically reduce 5 the use of nitrogen fertilizers. In 2007-2008, I was 6 7 award-awarded the Loeb Fellowship with Harvard University in which I did my study and did my 8 9 affiliate teaching, but also during that time did a test plot in Harvard yards. I wanted a test plot for 10 11 the school to see, and during that time Harvard 12 retained me as their Developer of Landscape Programs 13 in which we again transitioned the-the school to a 100% organic program, very similar to the one at 14 15 Battery Park City during that time as well. And so, 16 I've been working with them. I am still working with 17 Harvard, and both the Soil Lab, which focuses on 18 biological assays, but my techniques are process 19 based as opposed to product based. I don't feel that 20 there is any substitute for landscape mangers to 21 knowing the biological systems we are working with. This is key. If we have that understanding in 2.2 23 getting that balance, many of the landscapes that we see in the urban and suburban environments, I would 24 consider to be environmentally disturbed sites 25

because we've broken down the national-the natural 2 3 function of these-of these systems. During my time 4 in Boston I also converted the Park, the Rose F. Kennedy Greenway, which is the central artery in the 5 Financial District of Boston, which again is 100% 6 7 organically maintained park system. So, with that 8 said, I think it certainly is possible, more than 9 possible to maintain large public spaces organically and have it be successful with no detraction of 10 11 quality. In fact, a more vibrant healthy landscape 12 and bring back the actual balance that is required in 13 those landscapes. And I should say many of the 14 things that people ask are the cost factors. 15 Essentially it's process based as opposed to product based. Education is required obviously, but there is 16 17 really no cost difference. In fact, Harvard found 18 that they used 50% less water in the first year of 19 utilizing these techniques. So, there is just a 20 difference as to how you allocate-how you manage that 21 landscape and you do so with real scientific data, 2.2 and you respond to that the same way. So, I'd kind 23 of make the analogy you wouldn't go to a doctor who doesn't know the difference between your liver and 24 25 your spleen. You would also want practitioners

1 COMMITTEE ON HEALTH 87 managing your landscapes who understand the 2 3 biological systems that we're working with. On that, I think I'll finish up. Thank you for-for listening. 4 5 CHAIRPERSON JOHNSON: Thank you for your testimony. Thanks for being here, and thanks for 6 7 being patient. 8 NICOLE: [off mic] Good afternoon, and 9 thank you--CHAIRPERSON JOHNSON: [interposing] You 10 11 can just turn the mic on. 12 [on mic] Okay. Good afternoon NICOLE: 13 and thank you. My name is Nicole. My son and I go 14 to the park about four or five times a week. I'm a 15 stay-at-home mom, and he is now 14 months old. When 16 we go to the park, he walks fast on the grass, he 17 crawls. He sits in the grass and often picks up 18 clumps and puts them in his mouth. He'll pick up a 19 stick and also put that in his mouth, and often pick 20 up rocks and other things along the way, and put them 21 in his mouth. My great hope is that the most 2.2 dangerous thing we would encounter in the park is 23 from the natural world, a mosquito bite, a bee sting, perhaps a sharp stick that ends up being grabbed in 24 the wrong way, but my great hope is that that would 25

2 be the most dangerous thing we encounter. Sadly, 3 that's not the case. Most of the most dangerous 4 things we'll encounter to his health will be from the manmade world, toxic chemicals. Things that perhaps 5 won't show themselves for a long time in his little 6 7 body, but will affect him. Although there have been 8 studies-so many studies, as the previous panel 9 mentioned, demonstrating deleterious and toxic effects of these chemicals, there is no proof, and 10 11 there probably will not be any proof. Keep in mind 12 it took decades just to prove that smoking causes 13 cancer. Decades where the tobacco industry fought tooth and nail, and when you have a company that 14 15 creates new pesticides each year multiple companies, 16 that make a fortune producing new pesticides and 17 toxins every year. They have done their best and 18 will continue to do their best to make sure that we 19 keep using them and blinded and hoodwinked into 20 believing that they're safe. We should only use what 21 we know to be safe, and I really like what the 2.2 gentleman prior to me had mentioned about having 23 places that really need the management of the land without chemicals, and could do with the management 24 of the land without chemicals, and not necessarily 25

2 need them. There is very little that know is truly 3 safe, and I really am glad that we're having this 4 hearing although it's disheartening to think that New York City in our parks where our children sit, would 5 even consider putting chemicals that even might be 6 7 toxic on the grasses, on the plants, on the flowers 8 that our little babies in their mouths, have on their 9 skin, and have on their body. A woman in the prior panel mentioned choosing our exposures wise-wisely 10 11 when they-when they are there. I think in reality 12 that is not possible. After so many studies, there's 13 still so much information that still can be gathered and studied and looked at and researched. But at the 14 15 end of the day, we know that these things are not 16 safe. We know that there are so many effects that 17 could or might or do happen in various circumstances, 18 and we want to eliminate that. So, I really 19 appreciate that we're having this hearing, and I 20 really thank you for putting across this bill. I 21 would ask that everyone who thinks of this just 2.2 thinks of your child, your little baby walking in 23 that grass, putting it in his mouth, eating that clump of dirt, and think what do I want going in his 24 25 mouth? Thank you.

89

2	CHAIRPERSON JOHNSON: Thank you very much		
3	to this panel for testifying. Council Member Kallos		
4	has some questions for you all.		
5	COUNCIL MEMBER KALLOS: My first question		
6	is to my friend at Food and Water Watch. So, we have		
7	the support of our Chair. We have the support of		
8	several members, but there's 51 members of the		
9	Council. Would Food and Water Watch make this a		
10	priority before December of trying to get us at least		
11	to 26 sponsors for this legislation by mobilizing		
12	your members in all 51 Council Districts?		
13	ERIC WELTMAN: We'll-we'll-I'll take it		
14	up with the powers that be, but yes. We'll-we'll-		
15	we'll work on it.		
16	COUNCIL MEMBER KALLOS: So, Eric, just		
17	thank you for your stewardship at Battery Park City.		
18	I will disclose that growing up in the city there		
19	aren't very many places that folks can go that are		
20	safe. So, there was a group of us from a high school		
21	I went to, which is-was in the Bronx, Bronx Science		
22	in Stuyvesant and Brooklyn Tech, and you're nodding		
23	so you may have noticed a group of 30 to 50 kids who		
24	were playing at the Battery Park City Park after		
25	school sometimes. And so, I just want to thank you		

2	for that, and so the city in their testimony
3	indicated that they felt that they needed the toxic
4	pesticides in order to deal with public health
5	concerns such as rodents and others. I—I go to your
6	park quite often. It's one of my wife's favorite
7	parks, and the city is after, of course, all of the
8	parks in my district, but I don't see rats running
9	around. I see people eating. I-I see people
10	playing. How do you deal with that challenge, and is
11	there any merit to Department of Health and Mental
12	Hygiene and Parks' arguments that they need these
13	toxic pesticides?

ERIC WELTMAN: I won't speak to their 14 15 statement, but I will say (coughs) that again dealing 16 with all these systems, they're complex systems, and 17 similarly to dealing with landscapes and how they 18 wok, obviously dealing with rat issues take a similar 19 approach, which is a smart approach, and 20 understanding what and how these creatures function, 21 and understanding how to deal with them again in a non-toxic fashion because there's usually a lot of 2.2 23 answers in terms of how the public utilizes the park system and how the park system is managed. How do 24 you manage trash and garbage? We did a lot of things 25

2 in terms of how different restaurants, and buildings 3 got rid of their trash by the use of compactors. So, 4 getting rid of the food supply, getting rid of the water supply. Obviously, you can't get rid of the 5 real estate and the park system, but you have to take 6 7 these kinds of things into account as well when you're dealing with issues such as rats or other 8 9 The other thing that I think really ties vermin. into this, which I think is very important, you know, 10 11 Battery Park City or a university is a very good 12 example because it's a community and it really builds 13 a strong community. So, for instance, I built a really great, you know, rapport with the grocery 14 15 store owners, et cetera because I collected the pre 16 and post-consumer waste that went right into our 17 composting program, which then built the soil. So, 18 you're looking at a closed loop system. You're 19 utilizing the, you know, the resources of the 20 community, and when you do that, you have much wiser folks that have a better understanding of how their 21 community functions, and the different resources that 2.2 23 you have, and a different kind of caring for your community and then understanding. So many times it's 24 a philosophical change, and like I said, it's 25

2	understanding. You know, it's not product based.				
3	So, you're not looking at okay it's spring, we have				
4	to apply lime or we have to fertilize now or we have				
5	to apply this pesticide. Instead, now, okay, we have				
6	this data that we're going to utilize and make a wis				
7	decision based on that data. I hope I answered.				
8	CHAIRPERSON JOHNSON: Thank you very				
9	much. I want to thank you all for being patient. I				
10	apologize that I had to run to the Highline to be				
11	with the Mayor, but I'm glad I was able to hear the				
12	testimony from this panel. I'm sorry I missed the				
13	very cute kids who were here who did a skit and				
14	performed for us and we had the most cute and fun				
15	Council hearing this Council has ever had, and I look				
16	forward to working with my colleague and friend				
17	Council Member Kallos moving this legislation				
18	forward. I don't know why I'm not on this bill.				

19 I'll make sure that I sign up as a co-sponsor of this
20 legislation, and again, I would ask the same
21 question, and ask you all to engage our colleagues in
22 the Council as Council Member Kallos said and get
23 your members to sign onto this important piece of
24 legislation as well. So, thank you all very much.
25 Anyone else here to testify? Okay.

1	COMMITTEE ON HEALTH	94
2	FEMALE SPEAKER: Thank you.	
3	CHAIRPERSON JOHNSON: With-with that,	I ′ m
4	going to adjourn this hearing. [gavel]	
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

CERTIFICATE

World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. We further certify that there is no relation to any of the parties to this action by blood or marriage, and that there is interest in the outcome of this matter.



Date October 7, 2017