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CITY OF PHILADELPHIA
DEPARTMENT OF HEALTH
AIR POLLUTION CONTROL BOARD MEETING
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Thursday, July 26, 2018
MINUTES OF FORMAL BOARD MEETING
LOCATION: Municipal Services Building,
1401 John F. Kennedy Boulevard,
Philadelphia, PA 19102
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REPORTED BY: SHARISE THOMPSON
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HELD BEFORE:
EDDIE R. BATTLE, CHAIRMAN
ARTHUR L. FRANK, M.D., Ph.D
JOSEPH O. MINOTT, BOARD MEMBER
DR. SHANNON MARQUEZ, BOARD MEMBER
DR. CAROLINE JOHNSON, M.D.
ALSO PRESENT:
KASSAHUN G. SELLASSIE, Ph.D. P.E.
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2 PROCEEDINGS
3 - - -
4 THE CHAIRMAN: Good afternoon
5 everyone. The Air Pollution Control Board
6 is in session. As it is our custom, I
7 would like for my fellow members to
8 introduce themselves. Caroline, we will
9 start with you.
10 MS. JOHNSON: Caroline Johnson, Deputy
11 Health Commissioner.
12 THE CHAIRMAN: Ed Battle, Chairman.
13 MR. FRANK: Arthur Frank, Drexel
14 University.
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15 THE CHAIRMAN: Okay, so we don't have 16 a quorum as of yet. So, we are just going 17 to go with the agenda, and those areas 18 that we need a quorum, we will hold off 19 until we get the quorum. So, let's just 20 proceed. So, we are not going to approve 21 the minutes, obviously. So, I want to go 22 to the program updates, please. 23 MR. SELLASSIE: All right, okay 24 everybody, thank you for coming out. The Page 3 1 Chairman, Ed Battle, and the Board members 2 and quests, my name is Kassahun Sellassie. 3 I am the Director. I would like to report 4 the AMS progress. 5 Since last we met on April 19th, 6 2018 -- so, it's a three month report that 7 I will provide to the Board and guests. 8 So, the agenda: Welcome, action on 9 minutes is not yet approved, because the 10 quorum is not full. I think we have one 11 more person that we are looking for. The 12 program updates, so we changed -- I will 13 give you a short program update. I don't 14 know if it will take longer. Thirty 15 minutes I have only. I'm not sure if that 16 clock is working, but --17 THE CHAIRMAN: I got you. 18 MR. SELLASSIE: You got me, okay. And 19 ten minutes at the end for any questions 20 you have. And the presentation of dust 21 control regulation, the guorum is full, I 22 think. We will present that one. So, the 23 Board will approve it today, that's my 24 hope, we will finalize. It will have a 15 Page 4 1 minute presentation or less and 25 minutes 2 for any discussion or questions. The 3 presentation about the mobile air sensor, 4 Dr. Anup is here. He's going to present 5 it to us. He's from Drexel University, 6 Assistant Professor. The last one, our

7 next meeting will be October 25th, 2018. 8 So, the summary is air quality, the 9 National Ambient Air Quality Standard. I 10 will explain unhealthy and healthy air 11 conditions in Philadelphia, the State 12 Implementation Plan, EPA updates, PA 13 updates and AMS updates. 14 So, the air quality: The air quality 15 now is we have four unhealthy days for the 16 ozone. The last time we had zero, because 17 it was before April. So, 44 days of good 18 air quality and 43 moderate and we have 19 four unhealthy, which is from the ozone. 20 You see, 0 from PM2.5 is below the 21 standard, the problem from the ozone. 22 Maybe at the next October meeting we will 23 have a high value for the ozone, because 24 you remember last week and for two weeks Page 5 1 the temperature was high and the ozone 2 went up to 81 parts per billion. It was 3 very bad. So, we will see at the next 4 meeting. 5 So, we're at a marginal nonattainment 6 for the ozone. So, the highest we have is 7 always the Philadelphia Airport, so the 8 next step of research would include 9 finding out why that area is high. What 10 is the source? What is the cause? 11 So, May 18, 2018 the EPA administrator 12 lays out "Back-to-Basics" process for 13 NAAOS Reviews. The last time I told you 14 they wanted to change it to ten years to 15 review the NAAOS, but the Clean Air Act is 16 taken every five years, so the EPA 17 periodically collects reviews to protect 18 the public health and environment, so it's 19 now back to five years. So, the next one 20 will be 2020. Maybe the ozone will be 21 already reduced. It's based on the public 22 health. 2020 might be 65 or 60 or remain 23 the same. So, we'll know in 2020. 24 June 14th, 2018: EPA issues

Page 6 1 transportation conformity guidelines for 2 the 2015 ozone nonattainment areas. 3 Policy quidelines issued by EPA and/or the 4 DOT to assist State and local 5 transportation and air quality agencies to 6 implement the transportation conformity 7 program. This is by the Clean Air Act 8 176-C6. So, it's federally applied 9 projects like transportation, highway and 10 transit. The transportation conformity is 11 there, too, and it should be federally 12 applied. 13 So, once they have what we're doing, 14 there is also another for the 2015 ozone. 15 We have to submit a SIP provision, that 16 includes this federal transportation 17 conformity. So, what we've added is to 18 have some controlled measure and a 19 mitigation measure for any highway and 20 transit, just as a tool only. So, it will 21 be after the designation of 2018, which is 22 2019, August 3rd will be applied. We have 23 two reports, and the 2015 ozone standards. 24 On April 10th, 2018, EPA published Page 7 1 proposed amendments to MACT for refinery 2 sectors. This is for the flares. So, the 3 steam-assisted flares they have guidelines 4 and also the fenceline monitors for benzene, they are 5 already in the refinery, generally. So, 6 we have to wait one year, because it is an 7 annual average, a rolling average that we 8 take. So, we check if it's nine 9 micrograms per cubic meter, so if it's 10 over -- so, the only thing we can do is 11 correct the options we have to take. So, 12 the other one for this month is like 13 maintenance for preventions. So, the EPA 14 estimated that the proposed amendments 15 will save the industry \$77 million in 16 capital investments and \$12 million in

17 annual costs. So, it helps a lot, 18 especially for exhaust leaks and 19 maintenance and others. So, it is a good 20 standard guideline. 21 April 17th, 2018, EPA finalized 22 significant impact levels. This is good 23 for, Ed, people who are permitting, so any 24 place for prevention of significant Page 8 1 deterioration. So, once they submit the 2 problem permit, they check, they have to 3 look for PM2.5 and ozone. So, the latest 4 model is A2. If it's like one part per 5 billion of ozone, then we might say no, or 6 some case by case review. So, that is the 7 new change. So, the same for PM2.5. The 8 PM2.5 is the 24 hours it will take, 1.2 9 micrograms. So, for the PM2.5 and the 10 ozone is very important for that one. 11 The EPA releases an annual greenhouse 12 gas inventory every year. EPA released 13 the final version of its annual GHG 14 inventory for 2018, that is actually for 15 any source of greenhouse gas greater than 25,000 16 tons per year would be reported to the 17 EPA. Even sometimes they might have less, 18 but anything greater than 25,000 tons per 19 year of greenhouse gas is reported to the 20 EPA. So, there is a website. If anybody 21 wants that website, we can send it to you. 22 April 13, 2018: EPA denies 23 Connecticut's Section 126 Petition. The 24 EPA is denying a petition of Brunner Page 9 1 Island. The last time John Krueger of 2 DEP, Deputy Director, here explained about 3 this. I asked him to explain. So, 4 Connecticut said, "Okay, where is the good 5 neighbor?" Because initially we went 6 through NFK, so they have to do something, 7 but the court rejected that one. 8 MR. MINOTT: Kass, can I just be

9 clear? It's not the court that denied 10 NCPA. 11 MR. SELLASSIE: Yes. 12 MR. MINOTT: It would probably be an 13 appeal, would be my guess. 14 MR. SELLASSIE: Maybe an appeal, yes. 15 April 18, 2018, American Lung Association 16 released state of the air 2018. PM2.5 17 improved, but not ozone. So, the American 18 Lung Association is good. It takes all 19 the counties and ranks the air quality in 20 cities and counties across the country. 21 So, we can check that one to compare with 22 other cities. The 2017 and '15 design 23 value ozone was good, but now it might be 24 a little more. The American Lung Page 10 1 Association of 2014 and '16 the design 2 value is a little bit high. The estimate 3 at the time for 2014 and '16, around 139 4 million people exposed to an unhealthy 5 ozone, but in 2017 and '15 it was like 125 6 million, so it's a big difference in two 7 years for the design value. So, the ozone 8 is worse compared to -- everywhere is 9 better nowadays, the same we have for 10 Philadelphia. 11 EPA updates, June 21, 2018, NACAA 12 urged EPA to tighten onroad heavy-duty NOx 13 standards. Tighter NOx standard for 14 heavy-duty trucks will help areas across 15 the country meet their legal obligation to 16 attain, or maintain, the health-based 17 National Ambient Air Quality Standards for 18 the ozone. That is our purpose. I had 19 asked last time about transportation. We 20 need to reduce, we need to do something 21 for transportation, because of the ozone 22 value, otherwise, we cannot attain the 23 ozone standard, even from 2015 to 70, 24 maybe in 2020 to 65. So, if you don't do

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1 something to expand, it doesn't work. 2 2023, 2033, we don't know, so that's why 3 we need to do something to reduce that 4 ozone from the city. 5 MR. FRANK: Before we go to the DEP, 6 the problem with that I see is going to be 7 two-fold. One, is that -- I think just 8 yesterday the government announced that 9 they want to relax automobile standards 10 and they've also announced that the old 11 engines that they put in over the road 12 trucks had been -- the plan to stop that 13 from happening is much more -- you know, 14 so, if anything, you know, they can urge 15 all they want, but the EPA is going in the 16 other direction, and, you know, the 17 likelihood of it going from 70 to 60 or 65 18 is, at the least with this administration, 19 not likely. 20 MR. MINOTT: Not that I would ever be 21 optimistic about what's happening at the 22 federal level, I do think the CAFE 23 standards have been -- were done extremely 24 well by the Obama administration EPA, and Page 12 1 I think that the EPA is going to have a 2 hard time doing away with them. So, I 3 mean, obviously it's going to be a lot of 4 litigation around that but not -- I'm 5 somewhat optimistic that they will not 6 win, depending which court they end up in 7 and depending on who's on the Supreme 8 Court and all the things like that. 9 MR. FRANK: The 12 engines probably, 10 too. The 70,000 of those that are going 11 to be out there shouldn't be there. 12 MR. SELLASSIE: It is a challenge. 13 There is always a challenge, like the 14 environmental activists and even cities. 15 You are right, a lot of them, the city 16 attorney generals and other rights to the 17 EPA are not -- there's always a challenge. 18 It is not like it's free, or we say that

19 it will pass, no. There is always a 20 challenge, and Congress might say no. 21 Congress should approve the last one, and 22 we don't know for next year what's going 23 to happen. 24 THE PUBLIC: I heard the car Page 13 1 manufacturers are pushing back against 2 these standards. Different states will 3 have different regulations and they will 4 have to make different cars. 5 MR. MINOTT: That is if the EPA 6 doesn't succeed in blocking the California 7 Public Utility with their standards. So, 8 if they do, which wouldn't surprise me, 9 then, I think, the manufacturers will get 10 behind one standard. 11 MR. FRANK: And also what will make 12 them harder to sell cars overseas is if 13 they reduce their emission standards. 14 MR. SELLASSIE: Okay, DEP Updates, 15 proposal making Title. The permit fees 16 might increase. Now, the program 17 presented the draft proposed Annex to 18 AQTAC, I think it's the Air Quality 19 Technical Advisory Committee, and the 20 Citizens Advisory Council on June 14th and 21 the 26th. Both endorsed the package, 22 that's good, and the program anticipates 23 bringing it to the EQB in the fall of 2018 24 for their consideration, which is not far, Page 14 1 so, it might be good news, that one. So, 2 we've increased the permits. 3 AMS update, AMS is working on future 4 increase in fees. AMS is working on the 5 phase-out of numbers four, five and six. 6 This is our next priority and a functional 7 priority, too. Actually, most of it is 8 his priority. It's very intoxicating, the 9 air pollution we are lacking a good 10 commissioner, so he pushed everything to

11 protect the public health and the 12 environment. He is working on that one. 13 So, AMS is working on risk assessment. 14 That will be after phase-out of four and 15 five that we jump to risk assessment and 16 dust control. 17 MR. MINOTT: I'm sorry. We would just 18 meet the arrangements, such as working on 19 the risk assessment, but in --20 MR. SELLASSIE: Oh, you remember last 21 time you and other people asked --22 MR. MINOTT: Right. 23 MR. SELLASSIE: That's why, so, based 24 on that one. So, now we are working on Page 15 1 answering them. 2 MR. MINOTT: I'm fully supportive of 3 it. 4 MR. SELLASSIE: Yeah, we are working 5 on that one. You started on that one, I 6 remember. 7 AMS is working on mobile sources, 8 updating regulation. This will maybe be 9 later on. We will see what will happen 10 maybe next year. Finalizing Citizenserve, 11 that is our biggest update. Start PAQS in 12 May. I'll explain. At the end, I might 13 have five minutes that I need. 14 THE CHAIRMAN: You are just about at 15 the end. 16 MR. SELLASSIE: At the end? 17 THE CHAIRMAN: You've been 20 minutes 18 with this. 19 MR. SELLASSIE: Okay, yes, ten 20 minutes, that I know. 21 Propose to PES a voluntary reduction 22 of greenhouse gas from each source. So, 23 fumigation, this is a point I want to 24 stress that is new. Now, we are looking Page 16 1 to permit Sessions and others that are 2 working with fumigation, because we have a

3 lot here, Tioga, specifically. So, it is 4 orderless and colorless, so the people, 5 they don't feel it. It ends up passing, 6 because of the color and odor. So, the 7 people complained. Now nobody complain 8 because of that. So, we still have the 9 work to protect the public. And there was 10 a question. You have to consider that 11 one. 12 THE CHAIRMAN: That's true. 13 MR. SELLASSIE: The Air Monitoring 14 Plan was submitted. We sent the open-path monitor to 15 Georgia and updated it. Now it's working very 16 nicely, which is measuring the toxins in 17 the South Philadelphia area, that's a good 18 sign. Village Green, 6th and Arch, we 19 have that one, measuring PM, ozone and 20 temperature. The public, specifically, 21 the tourists, they are checking on this 22 kind of stuff. It helps them to check the 23 air pollution. 24 The EPA Method TO-15, here I want to Page 17 1 stress is -- the good news for the Air 2 Pollution Board and the guests, I want to 3 mention here is the EPA grants us \$200,000 4 for Auto-GC. We have it, but soon we're 5 going to stop. That measures hourly the 6 VOC data. It's a 24 hour canister. You 7 collect the canister on a one-in-sixth day 8 frequency. So, this is continuously, 9 hourly, so it is good news, so we know the 10 air toxins are on time. 11 Quality Improvement, this is a section 12 that Tom Barsley is working, so we improve 13 everything, laboratory tests and even the 14 central program we have. So, we maintain 15 the quality for what we have. We do a lot 16 of outreach like our Science Festival for 17 children and for universities and others. 18 This is what AMS is continually doing. 19 It's a regulatory service for 20 everyone. From April 1st, 2018 to June

21 30th, 2018, we have 164 permits within 22 three months. We always add permits, and 23 resources, so that is adding air 24 pollution. So, AMS serviced 332 citizens Page 18 1 within three months, people complain, we 2 postpone using most of the time Keith 3 Lemchak. We have great inspectors. We 4 will add two more. This week or next week 5 there is an interview for an additional 6 two inspectors, so we are just serving the 7 community in the right way. AMS also 8 performed 1,212 inspections. Asbestos was 9 also included. AMS observed 62 vehicles, 10 which is idling. AMS issued 137 new NOVs. 11 We resolved 80, and \$57,690 from penalties 12 we collected. I still have five minutes, 13 no? I don't? 14 THE CHAIRMAN: Yes, you do. 15 MR. SELLASSIE: It should be two 16 minutes maybe for the --17 THE CHAIRMAN: Okay. 18 MR. SELLASSIE: For the PAQS. 19 THE CHAIRMAN: Well, we have a quorum, 20 so --21 MR. SELLASSIE: Okay. Just to explain 22 to you, we are measuring 15 locations, the 23 whole Philadelphia, almost 1,554 for a 24 difference point. So, here we have the Page 19 1 PM2.5 major in one instrument. This 2 measures nitrogen dioxide, sulfur dioxide, 3 ozone, nitrogen oxide, actually. And the 4 other, this one, also measures temperature 5 and related humidity. So, in one 6 instrument we have everything. This is a 7 PM2.5 we measure in our laboratory. We 8 have a consultant, so, they will do it. 9 So, this is the inside. This is the 10 compactor for PM2.5, the inside part. 11 So, this is how we do. We have the 12 plate, so we hang on that one just the

13 instrument and we have this marked in case 14 -- we don't want anybody to touch or 15 remove it, so, I hope the police -- and we 16 reported to the police and everybody 17 knows, or the security and others, you 18 know, because some people may say, "What's 19 that? You're looking or you are 20 controlling us." Even the people ask me. 21 I say, "No, this air pollution measure." 22 THE CHAIRMAN: How high is it? 23 MR. SELLASSIE: Sorry, that's good. 24 Okay, I need to explain. This is ten feet Page 20 1 high on the street level measurement. 2 We're calling it the street level 3 measurement. So, whenever you walk -- so, 4 to show, you know, how much air you 5 breathe or pollutants we breathe. So, it 6 is on a street level and it's implemented 7 already. So, everywhere. I'll show you 8 the map that we have. 9 MR. MINOTT: There are not very many 10 people that are ten feet tall. 11 MR. SELLASSIE: Otherwise, I will send 12 it to you. I mean, if you take the 13 product of the height -- if you take the 14 portion out, it varies. It's not as much 15 mixing. 16 MR. MINOTT: Kass, I was trying to 17 stall you here. 18 MR. SELLASSIE: Okay, I know, I know. 19 Here is one example. There is also City 20 Hall, you can see City Hall, one. So, 21 everywhere we have. So, this is all the 22 location we have. You see all of these 23 points and what we measure, by color, 24 PM2.5, PM2.5 sulfur dioxide, ozone and the Page 21 1 VOC data. Those are the ones we measure. 2 So, after that what will happen is we're 3 established now and supported by Dr. Farley 4 and Dr. Johnson. So, we work harder. So,

5 we will not stop here. So, that's what it 6 looks like. 7 This we already measured. You see 8 three stations we have 15, 15 days. The 9 highest I think is 13.1, Center City area. 10 The other is still above 10. We have a 11 standard with the commissioner. We want 12 to keep it below 10, but it looks like 13 it's higher. Maybe it's close to the --14 on the street than the height is not like 15 the rooftop or something we put, so that 16 is what happened. This is the area we can 17 measure. This is already the measured 18 one, just to show you. 19 The last one is we tried to put SEPTA 20 -- you've heard there are a lot of 21 problems with SEPTA. People complain. 22 They don't want this, a gas power plant, 23 so because of that we just put one nearby 24 there to show the public of the Page 22 1 concentration of the air pollutants. So, 2 I think I'm done. If you have any 3 questions --4 THE CHAIRMAN: Yes, Joe. 5 MR. MINOTT: Very quickly. So, Kass, 6 this is great. I will say that I've read 7 all of this before I came here, so you 8 don't have to go through everything. In 9 terms of unhealthy days, you had it going 10 through June 30th. Were there any more in 11 July? 12 MR. SELLASSIE: A lot, because I 13 mentioned in July we have a lot like even 14 up to 81, 79, 80, very high. We might 15 have more, maybe six, seven, maybe 16 additional. The October report will have 17 the totals. 18 MR. MINOTT: That is interesting. The 19 methylbromide, that's been an issue, 20 that's been around for a while. It seems 21 to me, if I remember correctly, there was 22 some resistance on the part of Tioga to

23 actually do something about it. Have you 24 been able to persuade them to see the Page 23 1 light? 2 MR. SELLASSIE: Yes. Ed -- we are in 3 the process of permitting, I think, and Ed 4 might explain. 5 MR. WIENER: A handful of them. We 6 haven't had to do permits for anything 7 that's really significant. So far we have 8 only done one temporary one, and then we 9 did a recent -- or I'm not sure if another 10 one was issued, but there are smaller --11 levels that are considered minor. 12 And what we have been doing is doing 13 some screen modeling based on the stack 14 and emission limits and whatever, 15 parameters, and just kind of comparing 16 that to -- our management that regulates 17 the six has some, um, what do you call it, 18 like ambient air modern guidelines. We're 19 making sure the screen modeling is below 20 that. And if it's not -- I think the 21 first one we had gotten I think originally 22 it wasn't, so they added a stack or 23 something along those lines, and then we 24 just make sure they meet the parameters of Page 24 1 those. Where it will get trickier is if, 2 you know, down the road we get something 3 that's, you know, instead of it being 8 4 tons, it's like 50 tons or whatever, and 5 then --6 THE CHAIRMAN: Have you done any 7 testing in the community? 8 MR. SELLASSIE: Not yet. Our plan, I 9 think, is to do modeling first to see how 10 it varies at different ground level 11 concentrations. That's suggestion one, we 12 do that one. And the second one is a 13 problem. As you mentioned, it is the 14 control one. So, they said it's very

15 expensive to control, but when they do the 16 analysis they say, "Oh, it's expensive. 17 It is not cost-effective. We cannot do 18 it." There are some in like California 19 and, I believe, in Virginia they've 20 already started using that one and it is 21 effective and it is good, so we want to 22 apply that. 23 MR. MINOTT: Cost-effective depends on 24 who's --Page 25 1 MR. FRANK: Who's the cost and who's 2 affected. It's also pretty toxic stuff. 3 You would hope they would find something 4 else to use or that -- you know, 5 cost-effective means profits are going to 6 go down, but it's going to protect the 7 community. 8 MR. MINOTT: The last time I think 9 they threatened to leave the port if they 10 were regulated too hard. 11 MR. SELLASSIE: The other point here 12 is the protocol was banned in 1987. So, 13 why only here we use it? I don't 14 understand. 15 MR. MINOTT: Of the 62 vehicles that 16 the Air Management Services was looking 17 at, there are only two citations. 18 MR. WIENER: We didn't do as much 19 targeting enforcement during the last 20 quarter. We had -- our focus was more on 21 dust sites. We inspected most of the demo 22 sites for L & I. We get notifications 23 from them, so that's been our focus. 24 MR. MINOTT: And on the very last Page 26 1 thing that you're showing in terms of the 2 measurements, and I think that's great, 3 one of the things that I would like to see 4 at some point in the future when you do 5 these things is to look at two comparable 6 EJ communities, one that has more green

7 and trees and what have you than the other 8 and sort of see if that impacts the level 9 of pollution that people are impacted on. 10 MR. SELLASSIE: We tried in each 11 community, district, the council district, 12 wherever there is a ten district, to put 13 at least one in each district and each 14 community we consider. And the other 15 stuff is -- so, we measure one year. The 16 second year if we see somewhere a big 17 difference, we measure the second year. 18 So, we will find hotspot areas, then we 19 measure the second year where those 20 hotspots are the second time. And the 21 third one, you have to understand we have 22 to find out each point for concentration 23 by using a land model. So, we have 24 certain -- ZEV is in New York, and Jason, Page 27 1 they are working together here. In the 2 future AMS will handle everything for now. 3 So, we have that one. So, each point we 4 will find out the concentration by using 5 land user ignition or whatever and ArcGIS. 6 THE PUBLIC: Do you collect the PM2.5? 7 MR. SELLASSIE: Yes, this up here the 8 PM2.5. The one that's 12, 11 is a PM2.5 9 concentration. 10 THE PUBLIC: But do you collect 11 samples or do you just measure the 12 bundles? 13 MR. SELLASSIE: No, collect the 14 samples; collect and measure it. It is 15 filter based, so we collect it to our 16 laboratory, then we measure them. So, 17 this is filter based. So, I think I'm 18 done with that. 19 So, the next one is just what 20 additional -- for the dust control. We 21 will present a PowerPoint presentation. 22 THE CHAIRMAN: Just a moment. We will 23 get back to that. 24 MR. SELLASSIE: Okay, sure.

Page 28 1 THE CHAIRMAN: So, we do have a 2 guorum. So, I want to first have Shannon 3 and Joe introduce yourselves to the 4 public, please, and we'll get our minutes. 5 MR. MINOTT: It looks like I know most 6 of the public here, but okay, my name is 7 Joe Minott. I'm the executive director 8 and chief counsel at the Clean Air Council 9 and I'm a member of the Air Pollution 10 Control Board. 11 MS. MARQUEZ: Shannon Marquez, Vice 12 Provost at Drexel University and Professor 13 for Environmental Health. 14 THE CHAIRMAN: Members, you have 15 looked at your minutes. You have reviewed 16 your minutes. Are there any additions or 17 corrections to the minutes? 18 MR. FRANK: Move to approve. 19 MR. MINOTT: Second. 20 THE CHAIRMAN: We've moved in and 21 second. Those in favor of the approval 22 say aye. 23 THE BOARD: Aye. 24 THE CHAIRMAN: Those opposed. Page 29 1 THE BOARD: (No verbal response.) 2 THE CHAIRMAN: Thank you. 3 - - -4 MR. NUR: My name is Raihan Nur. I'm 5 going to present today proposed updates 6 for Regulation II, Section IX, #C. If you 7 have any questions, you can ask Kass. He 8 will answer any questions. 9 My first line says, "All filling, 10 grading, excavation or other earthwork 11 activities performed on a work site open 12 to the outdoor air must be adequately 13 wetted to prevent dust emissions, weather 14 permitting." If the weather is below 32 15 degrees Fahrenheit, you can use water. 16 So, you have to use other dust control

17 suppressants. "Dust control practices 18 presented by contractors and approved by 19 AMS can be used if the water based method 20 is ineffective or the temperature is below 21 freezing point. 22 MR. SELLASSIE: I'm sorry, to add one 23 more thing, it's not necessary to use 24 wetting. So, as far as a seal at the Page 30 1 bottom, a seal against the container, that 2 is also fine. So, they have authority, 3 and we are also preparing the guidelines 4 for some temperatures less than 32 degrees 5 Fahrenheit. We need to discuss it with 6 the Water Department, too. So, they might 7 say, "No, you can't use this one, because 8 it affects the water on the street." So, 9 we have to agree. So, maybe they use some 10 erosion control -- sedimentation. If they 11 put that one, that's okay. Otherwise, we 12 have to -- the Water Department has to 13 approve that. So, we are preparing 14 guidelines for that, for the chemicals. 15 THE CHAIRMAN: The two departments are 16 working together. 17 MR. SELLASSIE: Yes, we are working. 18 We sent them everything. 19 THE CHAIRMAN: Okay, good. 20 MR. NUR: The next slide is no 21 construction material or debris shall be 22 dropped more than 20 feet at any point 23 lying outside of the exterior walls of a 24 building or outside of a structure, except Page 31 1 through the use of a material chute. And 2 all debris shall be adequately wetted to 3 prevent dust emission or dispersion at the 4 point it exits a dust chute or reaches the 5 ground and chutes. All debris from any 6 demolition or renovation activity shall be 7 removed from the building, facility, or 8 other structure that should not cause any

9 dust emissions outside the fence line. 10 And drop heights must be kept to a minimum 11 when excavated material is loaded into 12 dumpsters and trucks for offsite 13 transport. And truck speeds should be 10 14 miles per hour at the construction area. 15 MR. FRANK: This is all in the 16 materials that we have been given and 17 read. Is there something new here? 18 MR. SELLASSIE: Yeah, it's a similar 19 one. Maybe the public may have some 20 questions. 21 MR. NUR: A silt fence and dust 22 control fabric panels or screens will be 23 affixed along the entire length of the 24 construction fence. The dust control Page 32 1 fabric panels or screens will be a minimum 2 of five feet in height and provide 50 3 percent blockage. And the requirement of 4 mud and dust removal from tires --5 MR. MINOTT: I don't actually 6 understand what that is. "A silt fence 7 and dust control fabric panels or screens 8 will be affixed... " Is that for all sites 9 or is that instead of? 10 MR. SELLASSIE: Usually when I discuss 11 with Dennis, a silt fence is what the 12 Water Department has, which is like --13 they call it like a filter. The Water 14 Department, erosion and sedimentations, 15 they have that one. We just take it from 16 the Water Department --17 MR. MINOTT: For the runoff from 18 the --19 MR. SELLASSIE: Exactly, from the 20 runoff, but, for dust, we use any fabric 21 like screen mesh, something like that we 22 use for the dust control. The silt fence 23 is mostly for runoff to retain the 24 sediments. This is a Water Department Page 33

1 matter, but, the regulation, we corrected 2 everything there. 3 MR. NUR: A permit is required for 4 earthworks associated with the grading, 5 excavating, or deposition or remediation 6 of earth on 5,000 feet squared of land or 7 more, a fugitive dust control plan must be 8 included in the permit application when 9 you are filing for a permit application. 10 It must be approved by the AMS. 11 The real time air monitoring for large 12 construction/demolition and earthworks is 13 determined by the Department. They will 14 advise recipients to take precautionary 15 measures to minimize dust exposure, such 16 as remaining indoors, closing doors and 17 windows, washing any exposed skin and 18 cleaning building entranceways. All 19 debris, excavated material and fill 20 material at the site will be adequately 21 wetted and covered during any temporary 22 onsite storage and during any transport to 23 and from the site. 24 MR. MINOTT: What qualifies as a large Page 34 1 construction demolition? What size? 2 MR. SELLASSIE: For which one? 3 MR. MINOTT: The very first one. It 4 says, "For large construction..." 5 MR. SELLASSIE: We've discussed it a 6 lot. What we've decided is it is best on 7 the Department, because if it is large --8 I mean, if it's small, even like lead, the 9 one we checked in the Kensington area, 10 like that, if it's something like lead or 11 like a gas station, for example, that 12 small, it might need some monitoring. So, 13 at any time AMS has a right to ask for a 14 sampling of like lead or similar stuff, 15 so, whichever we think. So, the history 16 of the area is determined. 17 THE PUBLIC: Does monitoring start 18 after activities have been initiated or is 19 there any pre-monitoring the notice in the 20 change in the pace? 21 MR. SELLASSIE: Usually one we had 22 already ordered for the ozone, I think. 23 What we did is whenever during the 24 construction period they put two down, Page 35 1 downwind and upwind, and all like the wind 2 direction and ozone, so, during 3 construction and after construction. That 4 might be a good idea, before construction, 5 to see the background concentration. 6 That's a good idea, maybe we can do that 7 one. 8 MR. NUR: As you can see in this 9 picture, there is a lot of dust on the 10 road. It's really unhealthy for people to 11 breathe, so, it should be adequately 12 wetted to prevent the dusting issue. 13 MR. SELLASSIE: One more point, sorry. 14 This is where we start. The mayor and 15 Commissioner Perry, so the mayor and the 16 public was very upset. Across this street 17 there is a playground for kids, so this 18 area is Kensington, where the lead is very 19 high. So, if you see the small work here, 20 as a result, there's no dust control. You 21 can see what it looks like. That's why we 22 want to add this dust control today. If 23 you see the next site, you can see this is 24 a small area from that, the dust, just to Page 36 1 show you how it is bad. 2 THE PUBLIC: Kass, I've got to tell 3 you, the construction site that I called 4 in to you, I live right across the street, 5 they did an amazing job. They took down 6 the whole building that was a whole block, 7 and I didn't see any dust anywhere. 8 MR. SELLASSIE: Yes, because we have a 9 permit for that one, and we inspect before 10 and during, and we also issued a permit

11 for that. That's why we need a permit to 12 relieve some dust control. 13 THE CHAIRMAN: Did you say before they 14 began to --15 MR. SELLASSIE: Before they began, we 16 checked the area and everything, the 17 inspector, because before we measure, we 18 see the area. Second, we see if there are 19 any notifications, because they have to 20 notify within ten days before the 21 construction starts. So, this kind of 22 stuff we check. If they don't do it, we 23 tell them. "No you cannot start in ten 24 days." You have to notify the community. Page 37 1 I mean, it depends on the building. 2 MR. NUR: That kind of work, 3 earthwork, that's associated with the 4 grading and excavation, and the future 5 dust control plan must be included in the 6 permit application and approved by AMS. 7 As you can see in the image, the 8 debris is falling from the first floor to 9 the ground floor, and there is a lot of 10 dust emission. It must be adequately 11 wetted to prevent the dust emission. 12 MR. MINOTT: Wouldn't there be an 13 audit OSHA requirement for that, too? 14 MR. SELLASSIE: Yes, an OSHA 15 requirement, especially for training on 16 how to use the chute, but mostly I've 17 discussed with OSHA and L & I. They're 18 usually concerned with the safety of the 19 employers. 20 MR. FRANK: You wouldn't be doing it 21 with the asbestos stuff, supposedly. You 22 would be doing it with drywall or 23 concrete. 24 MR. SELLASSIE: The other point that I Page 38 1 want to mention is whenever we use dust 2 control, it's not only about dust or

3 PM2.5. It might contain lead or asbestos. 4 So, any wetting will control all of this 5 dust. 6 THE PUBLIC: Is OSHA ever doing site 7 inspections, too? 8 MR. SELLASSIE: I'm not sure, because 9 one time -- you remember about the nail 10 salon. The OSHA people came, no? The 11 community. 12 THE PUBLIC: The site organization, it 13 looks like they have priorities, like if 14 you are a small company, it's considered 15 low priority. 16 MR. FRANK: If you are under eleven 17 people, you don't even come under OSHA. 18 So, if the demolition crew is less than 19 eleven people, they will never show up. 20 And probably the only time they will show 21 up is if there is a death, which is not 22 what you want. When OSHA started, if you 23 were a general industry facility, you 24 could expect an inspector about once every Page 39 1 25 years. Now the number is about one and 2 a hundred years. So, the likelihood, you 3 know, this will be inspected is close to 4 zero. 5 MR. NUR: The last slide, as you can 6 see, there is a lot of dust emission from 7 the loader. When you're excavating, 8 loading into a truck, a dumpster, it 9 should be kept to a minimum so that there 10 is not much dust emission. That's all I 11 have. 12 MR. MINOTT: It's not related to dust, 13 but is there anything that requires that 14 the trucks that often sort of line up and 15 are waiting, that they turn off their 16 engines? You know I was going to ask 17 that. 18 MR. SELLASSIE: I understand. 19 THE PUBLIC: If they're just sitting 20 and not doing work --

21 MR. SELLASSIE: Not doing anything, a 22 violation. 23 MR. MINOTT: We'll let you know. 24 MR. SELLASSIE: Okay, one more thing. Page 40 1 This is not easy, the dust control permit. 2 So, it took long, because we have to 3 discuss each point. They took their time 4 for today, and I appreciate what they have 5 done. The projects are public, so thank 6 you all, departments and others, AMS. 7 THE CHAIRMAN: I have a question, 8 Kass. On the loaders and trucks, they're 9 going in and out of the site. They're 10 tracking dirt, dust in their treads. Is 11 that looked at in any way? 12 MR. SELLASSIE: A tire wash. It is 13 there in the regulation. That's another 14 problem. Now we have a tire wash, because 15 last Saturday I went and I took pictures. 16 The street was dirty. There was no tire 17 wash, and even the loading there were more 18 trucks. There was a lot of dust. So, 19 there should be a tire wash. 20 THE CHAIRMAN: Joe will be right back, 21 but we're okay. So, while we are 22 waiting --23 MR. O'NEILL: Kass, do you want us to 24 point out any particular legal items that Page 41 1 we went through? Do you want us to 2 highlight anything? 3 MR. SELLASSIE: Yes. 4 MR. YUEN: So, my name is Dennis Yuen. 5 I'm one of the attorneys in the City Law 6 Department. I helped Air Management sort 7 of put together an initial draft of this 8 regulation. So, among the highlights that 9 were the changes, just very quickly, under 10 AMR-1, Section-IB, there was an addition 11 of a new definition. This all has to do 12 with earthworks. This matches L & I's

13 definition of land clearing or grubbing or 14 any earth disturbance of over 5,000 square 15 feet. That was put in there because the 16 regulation changed, add notification 17 requirements, a ten day notification 18 requirement to nearby occupants. You have 19 to notify them in writing in a form that 20 the department sort of prescribes before 21 you do those earthworking activities, 22 that's in addition to an L & I permit type 23 requirement. And you also, in addition to 24 the notification, what the agency wants is

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1 they want a full dust control permit, the 2 same sort of dust control permit that was 3 required for demolitions of buildings that 4 were three stories tall, or, implosions, 5 they wanted to apply that to those kinds 6 of excavations or land clearing or filling 7 type activities. Again, disturbing over 8 5,000 square feet you have to comport with 9 L & I's building permit requirement. 10 In addition to that, those notices and 11 under older versions of the regs, all of 12 those notices for any site for which you 13 needed to have a permit, you just had to 14 provide that to the neighborhood, but now 15 there has been in the proposed changes 16 under the AMR-2, the substantial changes 17 from the notifications, those 18 notifications also have to be provided to 19 the department. So, you have to send them 20 to Air Management as well, so it's an 21 additional regulatory requirement. 22 Outside of the earthworks and the 23 notification changes, there were a number 24 of changes to the work practice

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requirements that applied to all
 construction, demolition and excavation
 type work, regardless of whether you need
 a permit or notification or not. Those

5 things include things like that were 6 previously mentioned there is dust 7 suppression for all excavation or filling 8 type activities where you have to apply 9 water or some other approved dust 10 suppressant method. And water is 11 prohibited if the temperature drops below 12 freezing. 13 There is a requirement that you wet 14 seep access roads on the construction site 15 and also you use stuff to control vehicle 16 track out, this is either by tire washing 17 or putting in gravel strips or whatnot, 18 rumble strips at the entrances or exits of 19 facilities. On top of that, there is a 20 material chute sort of drop height type of 21 requirement. So, if you're dropping 22 materials more than 20 feet outside of an 23 existing building or structure, you've got 24 to do it through a material chute. Page 44 1 Material being dropped in the chute needs 2 to be wetted or alternatively if it's not 3 wetted, the chute has to be sealed against 4 the top of the container that's receiving 5 the material, to prevent dust from flying 6 out of it. 7 MR. O'NEILL: The truck would be 8 covered, then? 9 MR. YUEN: It's not necessarily a 10 truck, but the receptacle --11 MR. MINOTT: A truck or a dumpster. 12 MR. YUEN: A truck or a dumpster, 13 whatever sort of container that's catching 14 the material. That's the big change. And 15 there is also a mention of the air 16 monitoring or dust sampling type of 17 requirement. That's if the department 18 believes that it's necessary for certain 19 construction or demolition type of 20 activities to ensure that there is no 21 impact on sort of dust generated from that 22 activity on neighboring properties.

23 Lastly, there is a change in the 24 regulation, which adds a requirement, but Page 45 1 it mirrors the existing State requirement. 2 So, it's something that AMS has been 3 enforcing, but now it's explicitly stated 4 that no visible dust is allowed beyond the 5 property line of a demolition or 6 construction site. This mirrors the State 7 requirement, so in a sense it's new for 8 the regulation, but not new in terms of 9 what the agency is doing. That's pretty 10 much the substantive changes in a 11 nutshell. There were some other 12 corrections that were done for grammar and 13 spelling and whatnot that went through, 14 but other than that, those are the major 15 changes. 16 THE CHAIRMAN: Members, do you have 17 any questions on the changes to the 18 regulation before we consider it? 19 MR. MINOTT: Just a process one. So 20 let's assume that we approve it. I guess 21 that's what you're asking us to do, right, 22 to approve the changes? 23 THE CHAIRMAN: Yes. 24 MR. MINOTT: What happens then? Is Page 46 1 there a public comment period or is that 2 not necessary? 3 MR. O'NEILL: No. That will be the 4 normal process. It goes to -- what really 5 happens is the Law Department prepares a 6 transfer letter for the health 7 commissioner to send it to the Department 8 of Records. Once it's in the Department 9 of Records, it's open for public comment 10 for 30 days, and, during those 30 days, in 11 addition to making a comment, people can 12 request a public hearing at which to make 13 a comment. There may be people here 14 today, too, I don't know, but that's the

15 normal process, 30 days. You can ask for 16 a hearing. Usually what we do is we set a 17 hearing date and put something in the 18 public notice that says the hearing is 19 requested. It will be on this date. If 20 none is requested, it will be canceled, 21 that way it kind of shortens the process. 22 They have hearings on the 31st day or 23 something like that. And, then, after 24 that, if there are no comments, it becomes Page 47 1 law. If there are comments, AMS with the 2 help of the Law Department will review 3 those and do a comment and response 4 document. If there are no changes, again, 5 it just becomes law. If someone brings up 6 a comment that generates an idea that 7 makes us think that something should be 8 changed, then AMS will come back to the 9 Board and say, "You know what? Maybe we 10 really ought to tweak this a different 11 way." And then you will vote on it again. 12 That's happened once or twice. 13 THE CHAIRMAN: Members, do you have 14 any other questions on the update, the 15 changes to the regulations? 16 THE BOARD: I move for their adoption. 17 THE CHAIRMAN: Is there a second? 18 THE BOARD: Second. 19 THE CHAIRMAN: Those in favor. 20 MR. O'NEILL: Do you want to ask the 21 public if there are any comments? 22 THE CHAIRMAN: Public, we are open for 23 discussion, thank you. Do you have any 24 comments on this reg, on changes to the Page 48 1 regulation? 2 THE PUBLIC: It sounds like a great 3 regulation. 4 THE CHAIRMAN: The Law Department and 5 Air Management really worked diligently 6 and persistently to give us this great

7 product, so thank you both. 8 THE CONTRACTOR: Who will be -- so, if 9 you have a demolition permit and you go 10 through the normal process, who's 11 regulating the dust permit? 12 MR. SELLASSIE: AMS will. We apply 13 for the permit, so the registration is 14 behind you. 15 THE CONTRACTOR: Right. So, the 16 permit goes through and you post it and 17 everything else, I get that. But then who 18 -- you have a ten day notification. 19 MR. SELLASSIE: Right. 20 THE CONTRACTOR: So, it's posted for 21 ten days. Who is managing any issues that 22 came up on day eight and doesn't get to --23 you know, and then all of a sudden you are 24 starting that job? Page 49 1 MR. SELLASSIE: We have enforcements. 2 The enforcements, they will check. If 3 something is missed, they contact the 4 contractor and the consultant. They will 5 rectify or change what they want to 6 change. 7 THE CONTRACTOR: So, if the job starts 8 and there's an issue right before that ten 9 day posting or during that ten day, 10 they'll just revise it from there? 11 MR. SELLASSIE: Yes, that's the 12 process. 13 MR. FRANK: Doesn't the posting have 14 to be up for ten days before you start the 15 job? 16 THE CONTRACTOR: Right. But I'm 17 saying day nine you have an issue or you 18 raise a question, who's managing that? 19 Because what happens is the job starts, 20 and late in the process day seven, eight 21 or nine, I don't know what the turnaround 22 time is, if it's three days, two days or 23 one day. Um, so, it's one more thing --24 not to delay the start, but if there's a

Page 50 1 suitable revision to it or whatever, or --2 MR. O'NEILL: The ten day notice is 3 mostly for the public so they can sort of 4 get ready for the event, if there's going 5 to be a demolition there. I'm not quite 6 sure what would come up. You're thinking 7 maybe a person, the public, would complain 8 about it happening? 9 MR. SELLASSIE: I think that is his 10 point. If someone comes up on the ninth 11 day, if someone complains about something 12 that they don't want or something is 13 wrong, then I think -- maybe, I am not 14 sure, are you a contractor or a 15 consultant? Maybe you are? 16 THE CONTRACTOR: Yes. 17 MR. SELLASSIE: I understand. So, 18 what will happen on the 9th day? The 10th 19 day they prepare to start construction. 20 The 9th day, oh, there is a problem. Can 21 we do anything? Unless we see case by 22 case. If it's public health or something, 23 then, yeah. I don't think there's any 24 problem about --Page 51 1 THE CONTRACTOR: No, I understand. 2 You submit it, you get your permit. I get 3 all of that. So, the contractor's license 4 that I sent for, they are just unsure of 5 enforcement and, you know, since this is 6 something new, is this going to be a job 7 that's going to shut down? All of these 8 questions arise, because there are a lot 9 of areas that aren't being vetted out. It 10 may have been vetted out during the 11 process, but everybody else, they don't 12 know that. They just raise these 13 questions based on the impact of their 14 job, their time frame and everything else. 15 MS. JOHNSON: What does the public 16 notice say to call? Who does it say to

17 call? Is there something at the bottom of 18 that that says --19 MR. O'NEILL: The contractor as well 20 as Air Management Services. 21 MS. JOHNSON: So, the Air Management's 22 number is on that public notification? 23 MR. SELLASSIE: I think so. 24 THE CONTRACTOR: I don't remember if Page 52 1 one of the general numbers are on it. 2 MS. JOHNSON: But you gave them a 3 place to call if there was an issue? 4 MR. SELLASSIE: Yes. 5 MS. JOHNSON: So, if there was an 6 issue and they came to you on day nine, 7 you would look into it, right? 8 MR. SELLASSIE: Yes. It never 9 happened, but maybe that's a good concern. 10 THE CONTRACTOR: The only thing that's 11 happened -- part of the reason we modified 12 the notification form template is the way 13 it was written, it was apparently scaring 14 people. It made it seem a little bit 15 more --16 MR. SELLASSIE: Once we issue a 17 permit, I mean the people -- that 18 notification is to take some precautions, 19 close doors or stay inside, that's the 20 only way. Once we issue a permit -- I 21 don't think so. 22 MR. YUEN: Well, let me just clarify a 23 little bit. So, the notification 24 requirements under AMR-2, they apply --Page 53 1 they're supposed to be posted ten days 2 before you start work, but they apply --3 for the most part, most construction 4 complete demolition type of work for which 5 you need to get an L & I permit for across 6 the board of those jobs there's only a 7 small selection of them that you need to 8 get a dust control permit from Air

9 Management. 10 If you are doing demolition of a 11 structure that is three stories or taller, 12 or it encompasses more than 10,000 square 13 feet, that's when 90 days before you start 14 that work you go to Air Management and you 15 say, "I need a dust control permit in 16 addition to my L & I permits for 17 demolition, or the resulting zoning 18 permits for total demolition of a 19 structure." 20 If you are doing a larger demolition 21 that falls into that class, you would 22 have, presumably, ten days before you 23 start that job. Hopefully, you would have 24 a dust control permit at hand from Air Page 54 1 Management already approved that tells you 2 what you have to do to control dust at 3 that demolition site. You don't need a 4 dust control permit for construction. You 5 do need a dust control permit, as we said 6 before, for earthworks, that's land 7 disturbance over 5,000 square feet, which 8 also comports with L & I's requirements, 9 and you would need an L & I permit for 10 that as well. 11 THE CONTRACTOR: But if you wanted to 12 clear a lot, 7,000 square feet, you need a 13 dust permit for that. 14 MR. YUEN: Yes. Not only would you 15 need an L & I permit, you would need a 16 dust control permit from AMS and you have 17 to apply 90 days in advance. For those 18 kinds of jobs, after you get your dust 19 control permit ten days before you are 20 supposed to start, you are supposed to 21 post a notification on your fence line 22 that says -- and it's on a form that the 23 health department will give you. It 24 basically has blanks that you fill in,

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1 essentially. Now, people may call, they 2 may complain, they might say I'm worried 3 about X, Y, Z, but if you're compliant 4 with your permit, and you're compliant 5 with the notification period, then 6 arguably there really isn't -- you know, 7 unless there's massive amounts of dust 8 leaving the site, which it shouldn't be, 9 because you haven't started yet, there 10 should be no reason for the department or 11 anybody else really intervening from the 12 City side to say, "Hey, you've got to stop 13 doing your work, because we don't think 14 your permit is adequate." And certainly 15 if the City were to do something like 16 that, you would have the case to say, "You 17 gave me the permit." So, I mean, to the 18 extent that you are worried about like how 19 the enforcement works, that's kind of how 20 it works. 21 THE CONTRACTOR: With most permits 22 there are inspections. Is there an 23 inspection that has to be scheduled to 24 close the permit out or to --Page 56 1 MR. YUEN: The department may require 2 one, but it's not specifically stated in 3 the regulation requirements, but the 4 department always has the authority. 5 THE CONTRACTOR: So, you can have a 6 dust permit in place, it's compliant, and 7 you are working, there's no need to call 8 somebody. If they want to come out and 9 inspect it, they will inspect it. 10 MR. SELLASSIE: We come to inspect. 11 THE CONTRACTOR: No, no, that's fine. 12 MR. SELLASSIE: Here's the point in a 13 nutshell. You have the permit, if you 14 need a permit. Once you have that one, 15 even if you don't have a permit, you put 16 the notification before ten days. That 17 means if there is any problem, once the 18 public knows, they call. We have one

19 person sitting there taking complaints. 20 So, they can complain to us. It doesn't 21 matter if you have a permit or not. If 22 they see like dust or something, or 23 something wrong, otherwise, they have 24 nothing to do but to call, unless they see Page 57 1 something. So, if they don't see 2 something, we send an inspector. The 3 inspector will check and report. So, 4 there's nothing to worry about. If there 5 isn't any notice or it doesn't affect the 6 public health or the environment, you are 7 done. With the dust control, just do the 8 right thing. That's it. 9 THE CONTRACTOR: What's the process 10 for closing the permit? 11 MR. SELLASSIE: Closing the permit? 12 THE CONTRACTOR: Yes. No permits get 13 closed out of inspections and finals --14 MR. YUEN: Right. So, let me explain 15 how that works. When you are talking 16 about closing a permit, you're talking 17 about it in terms of when L & I does it. 18 When L & I gives you a building permit, 19 and there's usually a multiple stage 20 inspection process, you do some work. 21 L & I comes out and looks at it. So, the 22 Air Management permit for dust control 23 does not work that way. If you have a 24 site with a dust control permit, the Air Page 58 1 Management Services -- there's no 2 requirement that says Air Management 3 Services actually inspected your job to 4 make sure that it complies with the 5 permit. You may not see a single 6 inspector at all, but AMS will be 7 monitoring some of those jobs. They do 8 have a right to send an inspector to 9 verify that you are actually complying 10 with the revisions of the permit.

11 If you are not complying with the 12 revisions of the permit, whatever is 13 stated in there, they may issue you a 14 violation, but there isn't a requirement 15 for a contractor to call the health 16 department to say, "Hey, my permit says 17 that I was going to use water to control 18 dust for my excavation here. I want you 19 to verify that I'm actually using water to 20 do this." There's no requirement that you 21 actually do this. There's an expectation 22 that you will be doing what the permit 23 says. An inspector may come by. If 24 there's a complaint, certainly they may Page 59 1 come by as a matter of chance, because 2 they didn't receive the notifications and 3 they know when you are working, or someone 4 may call and complain and it may come by 5 as part of the complaint if they see that 6 you're not doing what the permit says 7 you're supposed to be doing, controlling 8 dust, they will issue you a violation 9 notice. If you are doing what you are 10 supposed to be doing, there's no violation 11 notice. 12 MR. SELLASSIE: Are there any other 13 questions, comments from the public? 14 THE PUBLIC: (No verbal response.) 15 THE CHAIRMAN: Members, those in favor 16 of approving changes to Regulation II, 17 Dust Control Regulation II, say aye. 18 THE BOARD: Aye. 19 THE CHAIRMAN: Opposed? 20 THE BOARD: (No verbal response.) 21 THE CHAIRMAN: Motion carries, thank 22 you. 23 MR. YUEN: Mr. Battle, the amendments 24 were also to Regulation I as well. Page 60 1 THE CHAIRMAN: Oh, I'm so sorry. 2 MR. MINOTT: So, I move the adoption

3 to Regulation I and II, Amendments I and 4 II. 5 THE CHAIRMAN: Thank you. Do we vote 6 again? 7 THE BOARD: Yes. Second. 8 THE CHAIRMAN: Those in favor of 9 approving Regulations II and I, say aye. 10 THE BOARD: Aye. 11 THE CHAIRMAN: Opposed? 12 THE BOARD: (No verbal response.) 13 THE CHAIRMAN: Motion carries, thank 14 you. Kass, let's move on to number five, 15 please. 16 - - -17 MR. DAS: Hello everyone. My name is 18 Anup and I am an assistant professor at 19 Drexel University, and this is one of the 20 proposals that I spoke with the City to 21 see if we can use mobile air sensors to 22 monitor the air quality in the city. I 23 think Kass already mentioned in short that 24 the device is stationary across the points Page 61 1 in the city. So, this is another way to 2 increase the coverage of the air. 3 MR. FRANK: Would this be a university 4 activity or an AMS activity? And would it 5 be done for the purposes of official 6 monitoring and regulation? 7 MR. DAS: So, this is a research 8 proposal that we submitted to the National 9 Science Foundation and we had support from 10 the City to see if we can install these 11 air quality sensors on some of the city 12 vehicles, which travels across the city so 13 that we can collect the information. And 14 what to do with it later on, how we can 15 help Air Management Services, we can see 16 later. 17 MR. FRANK: The concern there is that 18 mobile monitoring is, I think, regulated 19 under the Clean Air Act and is not 20 something the City can take on as an

21 official function, though it may do very 22 well as a research tool. 23 MR. SELLASSIE: This is a mobile 24 sensor. They move all around the city and Page 62 1 they check the concentration at each 2 point. What he's saying is you can put it 3 on city trucks or city vehicles, but what 4 they do is measure the concentration. 5 MR. FRANK: So, it's a sensor on 6 mobile vehicles, not mobile sensoring. 7 MR. SELLASSIE: Yes. 8 MR. MINOTT: It's different than what 9 you're thinking. 10 MR. FRANK: Okay. 11 MR. DAS: So, later on what we can do 12 is, and we'll talk about it in these 13 slides, is once we collect all of the 14 pollutant concentrations across different 15 streets, we were hoping that we would work 16 with the Clean Air Council to create maps 17 or biking routes for people who bike 18 regularly or even walk across the city to 19 see how healthy the roads are and change 20 their routes based on what the air 21 pollutants are across the streets. 22 MR. MINOTT: I have to admit, on 23 behalf of the Clean Air Council, we're 24 really excited about this project. Have Page 63 1 you heard if you had gotten funded yet? 2 MR. DAS: It takes six months, so by 3 August we should have heard something 4 about it. 5 MR. MINOTT: Lunch is on me if you get 6 the funding. 7 MR. SELLASSIE: As of Wednesday, I 8 just talked to Dr. Dennis. He is also 9 working on this mobile kind of a sensor. 10 So, I think they want your presentation 11 sent to him. He's also working on this 12 one.

13 MR. DAS: So, this initial use, for 14 example, sensors on different city 15 vehicles have already been done in 16 California, and, also, in some cases, I 17 have seen it in Pittsburgh, for example, 18 where the air pollution is also very high 19 over there. Now, there are a lot of 20 things that we plan to do in the proposal. 21 I will just talk about it. We know that 22 in Philadelphia in particular there are a 23 lot of people who actually bike to work 24 and also walk to work. Now, when they

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1 bike or when they walk, which is very 2 important that the bike or the streets 3 that have no concentration of pollutants, 4 especially for those who have asthma or 5 other diseases, they are susceptible to 6 the air pollutant. And there is already a 7 website released from New York University 8 on healthoftheyear.org where you can put 9 in your zip code and it can show you what 10 is the model and incidence related to air 11 pollutants over the last one year. 12 So, our proposal in a very light 13 summary -- so, we talk about the 14 deployment of the sensors. So, these are 15 very low cost sensors that we deploy on 16 vehicles, then we do air quality 17 management. Because these are low quality 18 sensors, the data from the sensors are not 19 always reliable. So, how do we make sense 20 out of the data? How do we increase the 21 quality of the data? And, finally, we 22 would do some kind of personal additions. 23 That part we still have to work through, 24 so, basically, how much a person is

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susceptible to some of the air pollutants.
 So, a route that can appear good for one
 person can actually be bad for another
 person. So, this is kind of the personal

5 additions we are looking into. So, if I 6 can tolerate a certain percentage of 7 ozone, I can walk through this street, but 8 another person who might not be so much 9 tolerant might want to avoid that street. 10 So, this is the level of the personal 11 addition we want to bring in the proposal. 12 And apart from that, we will have a 13 kind of map that is already there. For 14 example, the GoPhillyGo app, which can 15 help to plan the roads in the city, we 16 want to add one level of an addition to 17 that, which is air quality. In terms of 18 deployment, we were thinking where do we 19 deploy the mobile sensors. So, ideally it 20 would be the SEPTA buses, which run 21 throughout the city, but, as a first 22 trial, we thought maybe we would use the 23 sanitation trucks from the City, because 24 they already go in a lot of neighborhoods Page 66 1 in the city. So, we were trying to see if 2 we could put those sensors on the 3 sanitation trucks. We can collect the 4 data from different neighborhoods as the 5 truck travels. 6 MR. MINOTT: So, I assume the sensors 7 will have GPS so you know what exactly --8 MR. FRANK: That would be real tough. 9 MR. DAS: That will be time stamped 10 and positioned, GPS. The thing is the 11 sanitation truck already has GPS sensors 12 installed, so it's just mounting the 13 additional sensors on that so we can time 14 stamp. 15 MR. FRANK: The concern I have about 16 the sanitation trucks rather than SEPTA is 17 that the sanitation trucks have daily 18 routes. So, you're going to get good data 19 five days a week, or whatever days they 20 collect garbage, five or six days, for a 21 particular area, but the areas are not 22 going to be covered at all where at least

23 if you did the buses, they do the same 24 thing every day and you will get a much Page 67 1 wider coverage rather than five separate 2 coverages. You know, Monday's date is not 3 going to be useful by Wednesday if it's on 4 a sanitation truck going a different 5 route. 6 MR. DAS: So, we had wrote in the 7 proposal SEPTA as well as sanitation 8 trucks, but we're still working with SEPTA 9 to have them get permission to install it 10 on their buses. It is kind of -- it was a 11 little bit --12 MR. FRANK: That may be tricky. The 13 other one you might want to think about 14 only because, again, this is getting into 15 the technical weeds. I don't know how 16 much the pollution from the vehicle itself 17 is going to change the reading. You might 18 want to think about the trolleys, which 19 are electric, which won't contribute at 20 all. 21 MR. DAS: So, basically this proposal 22 is for the first level. What we thought 23 about is that we want to characterize the 24 data that we are getting versus what is Page 68 1 ground truth to identify how much the 2 regular surface is giving pollution, then 3 you subtract everything. So, that is what 4 our plan is. We were also thinking of 5 using IBEX bikes, because the bikes have 6 no pollution at all. So, yeah, that was 7 what the idea was. And we can measure 8 many things. I spoke to AMS before and 9 they said that sulfur and lead are not so 10 important for the City of Philadelphia in 11 most neighborhoods, but, anyway, it is 12 independent of what we can do. 13 So, there are already monitoring 14 stations. The good part is the vehicles

15 travel across different parts, and at some 16 point in time they can come in closer to 17 one of these stations, which can help the 18 low cost sensors to calibrate, so you 19 don't have to go physically to these parts 20 and remove them and calibrate them and put 21 it back. The vehicles, when they pass 22 through the neighborhood of the high 23 quality sensors, it can calibrate by 24 themselves. So, that is another advantage

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1 from the mobile sensors. And then, as I 2 said, we had to do a lot of quality 3 management for the sensors, because the 4 sensors are low cost, so the quality may 5 not be that good, so you need to have a 6 lot of data quality management stuff that 7 we have to do for that. I did not talk 8 about it in too much detail about what 9 exactly we will be doing, but we can just 10 go to the personal addition aspect again. 11 As I mentioned, for the data that we 12 collect, we want to work with the health 13 profession to identify what the problem is 14 or what kind of problem those air 15 pollutants can create on a person. And 16 that information can actually go into the 17 app that we were thinking to bring so the 18 person can see a personalized route of the 19 city, where they should walk and where 20 they should bike. In the end, what we all 21 want is to have healthy air to breathe 22 when we bike and walk. 23 THE CHAIRMAN: Thank you very much. 24 Are there any questions?

# Page 70 1 MR. MINOTT: Just a comment. 2 Hopefully you will get funded and we would 3 be glad to go with you to SEPTA and see if 4 we can push them a little bit. We have a 5 little bit of an influence with them, not 6 a whole lot, a little bit.

7 MR. DAS: It would be good to have 8 SEPTA, because the coverage is one of the 9 best parts for Philadelphia, that the bus 10 covers so much in the city. And if we can 11 put it on the buses, that would be the 12 best thing to do. 13 THE CHAIRMAN: Well, it's a great 14 project. Any other comments, questions? 15 THE PUBLIC: Yeah, going off the SEPTA 16 versus sanitation, I'm a biker. So, I 17 actually try to avoid bus routes, because, 18 you know, you get a face full of their 19 fumes a lot of times. And, also, on 20 trolleys, another part of it would be, 21 people don't usually bike on trolley 22 routes, because the trolley tracks are 23 very dangerous. So, it's just something 24 to consider. I actually think that Page 71 1 sanitation trucks, even though you would 2 be confronting those issues with the days, 3 overall it would cover more space than a 4 SEPTA bus, right? 5 MR. DAS: SEPTA, sanitation, plus IBEX 6 bikes which we can put it so we have data. 7 THE PUBLIC: You're thinking about 8 doing both? 9 MR. DAS: First, we didn't get 10 permission from SEPTA. When we wrote this 11 proposal for the National Science 12 Foundation, we just put sanitation trucks, 13 but the idea is to have it cover the 14 entire State. 15 THE CHAIRMAN: Any other comments, 16 questions? 17 THE PUBLIC: How many sensors are you 18 planning on? And if they are low cost, 19 what is the cost? So, let's say you're 20 going to do a lot of SEPTA bus lines. 21 What would it cost? 22 MR. DAS: We are looking somewhere 23 between \$25 -- within \$25, the sensors. 24 THE PUBLIC: Per sensor.

Page 72 1 MR. DAS: It should be reasonably easy 2 for us to manage the cost. 3 MR. MINOTT: That would be great. I 4 have to say that we do some of that now. 5 Like we are in Kensington right now, where 6 we have global sensors. In fact, we 7 recorded the big fire that was there and 8 saw the big increase, but we couldn't come 9 up with a sensor that was accurate enough 10 below \$100. So, you should talk to our 11 engineer and he will tell you all the ones 12 he went through and failed with so you 13 don't have to repeat those things. 14 MR. DAS: The other thing that we were 15 doing is rather than having one sensor, 16 have multiple sensors. So, let's say two 17 or three \$25 sensors can come up with the 18 quality even good enough for \$100. 19 MR. MINOTT: That makes sense. 20 MR. DAS: And a lot of buses come 21 closer to each other, right? So, they 22 pass each other. So, you have more 23 coverage for more sensors. Thank you so 24 much. Page 73 1 THE CHAIRMAN: Thank you. 2 MR. SELLASSIE: Please sign the sign 3 in sheet, the Board. We need that one. 4 If you need electronic documents, I can 5 send it to you. My business card I will 6 put here. If anyone wants today's 7 presentation, I will send it to you. 8 THE CHAIRMAN: Number six on your 9 agenda, the next meeting will be October 10 25th of this year, obviously. Are there 11 any comments, questions from the public? 12 THE PUBLIC: (No verbal response.) 13 THE CHAIRMAN: Members, is there a 14 motion to adjourn? 15 THE BOARD: So moved. 16 - - -

17 (Board meeting concluded at 3:35 p.m.) 18 19 20 21 22 23 24 Page 74 CERTIFICATION I, Sharise J. Thompson, a Court Reporter and Commissioner of Deeds for the Commonwealth of Pennsylvania, do hereby certify the foregoing to be a true and accurate transcript of my original stenographic notes taken at the time and place hereinbefore set forth. Sharise J. Thompson Court Reporter Commissioner of Deeds DATED: (The foregoing certification of this transcript does not apply to any reproduction of the same by any means, unless under the direct control and/ or supervision of the certifying shorthand reporter.) PRECISION REPORTING, INC. (215) 731-9847