Technical Workgroup Meeting Notes

June 29, 2016

AQ101

What happens when there is an exceedance of benchmark? The benchmarks are annual goals, not enforceable standards. They are used as evaluation tools. The Air Toxics Science Advisory Committee looks at IRIS and CalEPA and other states. Benchmarks are process triggers. When we look at geographic areas around the state, we see how far above the benchmarks are we in different communities, then we focus on the areas of highest risk. We are making progress towards benchmarks over time.

Are the benchmark goals for where monitors are located? Or modeling was involved? Both. California has state level criteria pollutant requirements: ozone, particulate matter and an expanded list of criteria pollutants that include vinyl chloride and hydrogen sulfide. Statutory requirements to reach as quickly as feasible. For community levels.

SCAQMD has five permanent monitors in the region (10,000 square miles). Special studies monitor individual facilities for shorter periods of time. Multiple air toxics study every few years, 10 monitors for 1 year in specific communities. Washington has one permanent toxics monitor in Seattle in addition to year-long community based air toxics studies in local areas, funded usually by EPA grants.

DEQ monitors VOCs, metals, PAH, and aldehydes – over 150 chemicals. Oregon ambient benchmark concentrations are based on IRIS and OEHAA using a hierarchy to develop information and looking at data behind it.

Marjorie: DEQ should include cadmium in future monitoring because cadmium is a natural inhabitant of earth's crust, even higher in volcanic areas. Trees take in Cd and can emit significant amounts when wood is burned in forest fires. Does DEQ's fire season monitoring include cadmium? No, DEQ generally uses real time particulate monitors like nephelometers and these would not allow metals analysis.

The SCAQMD MATES study appendices contain ratios of elemental C to diesel PM. Diesel PM is considered a toxic compound in OR and has a benchmark.

The science for short term benchmarks was not evolved at the time the annual benchmarks were developed so the average concentration time is annual instead of hourly or daily. Monitoring and modeling (National Air Toxics Assessment) was done on an annual basis so DEQ decided to focus on annual concentrations. DEQ didn't have a program for setting levels closer to a facility where you could see higher levels for shorter time period. We are now analyzing 24-hour levels and working with OHA to interpret the results. Other types of exposures have not been considered, such an indoor air exposure (90% of time is spent indoors.) The criteria pollution

program has done a good job of messaging and communication about exposures. California has revised their guidance on how to conduct a health assessment and considers the fraction of time spent at home based on receptor location. The changes are carried out in risk assessments. It's important to understand the impacts from indoor versus outdoor air.

During the PATS (Portland Air Toxics Solutions) work, the computer model was under predicting monitored values. This is not an uncommon issue and has happened in South Coast. It is a flag that further investigation is needed.

Follow up:

- Sarah will work with the lab to see if metals (cadmium) in particulate matter from fires has been measured.
- Jill will look at SCAQMD's expanded criteria pollutant list.
- Sarah will work with the lab to see where are we exceeding the 52 benchmarks and what is the protocol for addressing exceedances and capture the data visually for committee.
- Sarah will update the multipollutant slide for GHG checkbox on smoke controls. PM and GHG are climate forcing pollutants.

Toxicology 101

DEQ and OHA have never used critical studies in other languages, just peer reviewed studies from IRIS, OEHAA, and ATSDR in a hierarchy to establish ambient benchmark concentrations. Those three agencies only use studies that are peer reviewed. DEQ and OHA have not derived values from our own primary review of literature. DEQ charges ATSAC to use established studies only because we do not have the time or resources to do primary literature reviews. Different jurisdictions review their toxicity values at different rates. A value that was established 10-20 years ago will not account for more recent toxicity studies that were published since the last review. If two agencies use the same critical study for derivation of their benchmark, and one has an uncertainty factor and other doesn't, DEQ and OHA may want to go with the agency that uses the uncertainty factor. The criteria you use in selecting primary toxicity studies for use in deriving benchmark concentration, for example whether or not non-English studies are included, can have a dramatic effect on the benchmark at which you arrive.

For implementation at SCAQMD, one thing that has been helpful to risk based permitting program is toxicology, something critical to what they do. They leave decision making and science out of individual permit decisions as much as possible. Decisions about toxicity and risk based concentrations should be made at the State level so that they do not come into play for every individual permit. Science is very technical and requires a lot of consideration, and making those decisions on an individual facility basis can present additional challenges.

DEQ's Air Toxics Science Advisory Committee reviews approximately five pollutants each month. ATSAC prioritized benchmarks for use in Oregon based on how common or how abundant it is in Oregon. List of 52 set as whole goal in 2006. Since then we review every 5 years based on latest science. The list of 52 pollutants could potentially be greatly expanded. EPA has 140 benchmarks on 189 HAPs.

About 10 years ago, WDOE revised their air toxics rule and revisited their list of toxic air pollutants. They previously used multiple sources to derive their list, some based on occupational exposure levels with applied safety factors. This approach might not have been best to apply to the air toxics list. Going through the list for each pollutant and looking at studies and papers was a monumental task. Management realized that it would be better to look at state or federal government or other entities with a team of people to develop framework to develop toxicity data and rely on them rather than trying to do it themselves. This greatly reduced the workload but required choices between agency numbers. If both EPA's integrated risk information system (IRIS) program and CA EPA have independently established health benchmark numbers for a given contaminant, which is better? Management didn't want to debate whose number is better so they went with policy decision to use the value that was most recently derived. This approach was not necessarily better but was used as time saving measure. The drawback of this approach for Washington is the loss in flexibility.CA goes through a similar process as EPA to derive toxicity value for a chemical and takes a long time, getting input from public and other outside scientists.

As mentioned before, different types of exposure have not been considered even though the average person spends 90% time indoors. Typically agencies assume 24 hour exposure outdoors as the worst case, conservative assumption. Knowledge of indoor air shows it is usually worse than outdoor air. The criteria pollutant program has done a good job of getting messages out, especially on ozone action days.

Applicability: New/modified/existing

Pros and cons:

- New and existing is low hanging fruit
- The existing sources are where the resources need to go. Ambient air does not differentiate when facility was built.
- To design the program correctly, you will have to capture new and existing sources.
- At a minimum, all sources need to register their locations and what their emissions will be.
- If you miss existing sources, you will be doing your program a disservice
- The existing sources are an extremely important part of your program.

- One of the reasons that WA focused on new sources is that it had the authority for only new sources. The thought was that over time, existing facilities would need to modify, and then they would have to meet screening or adopt T-BACT. Note – this plays out in many cases.
- It's important to know if you have the authority and manpower to carry out regulation of existing sources.
- Southwest Washington Clean Air Agency's regulations that cover new and modified sources are limited to only modified portions of the facility, not existing units at that modified facility. They can only look at the difference the modification causes. That is a disadvantage of the program.
- Existing facilities are likely to emit more, have the worst technologies, and also might not have the capital to update.
- New/modified emissions units are a great place to start an air toxics program.
- Title V does not generate new requirements for an existing source; it is designed to gather all applicability requirements and include monitoring, recordkeeping and reporting requirements.
- From the toxicology point of view, the most important thing is the substance of concern. Several programs have very conservative screening levels so this brings in many air toxics into the review.
- Driving businesses out of state is also a consideration. There are economic concerns that should be evaluated. Is there a way to have incentives at the same time as tighter regulation? For example, regulation phases out perc drycleaners, but also a source of funding to help people convert to cleaner equipment.
- DEQ and OHA may run into a fairness issue by not looking at existing sources. Why should new sources be held to a higher standard than existing sources?
- Regulation might not get you everything you want. DEQ and OHA need to look to other tools as well.
- Once a permit is issued in SCAQMD, the permit is forever. There is no renewal process. Maybe DEQ and OHA can use the renewal process to implement updates.

Applicability: Individual pieces of equipment versus whole facility

- Ambient air doesn't differentiate between whether the air comes from whole facility or individual pieces of equipment.
- Industry loves flexibility and the leniency to figure out how to meet the standard.

- Prescribing regulations to a piece of equipment does not encourage the facility to look at how best to reduce emissions.
- DEQ and OHA should encourage a holistic point of view when regulating air toxics.
- Maximum Achievable Control Technology standards already dissect facilities and regulate on an emissions units (equipment) basis. An additional layer of rules might not be helpful.
- Washington has an "offsetting" requirement which provides an incentive for the facility to get cleaner by reducing emissions in one area while increasing emissions from new or modified equipment.
- From a pollution prevention approach, DEQ and OHA may be able to look at different ways that allow the flexibility to actually prevent pollution. The more holistic approach encourages making the whole process better, not just emissions from one piece of equipment.
- In CA there is a cumulative analysis for all new emissions units. For existing facilities, the analysis is done on a facility-wide basis.
- For large, complex facilities, fenceline impacts depend on where a piece of equipment is located. This can have a dramatic difference between whole facility analysis and single equipment analysis.
- If existing equipment are included in the program, they need to be considered differently (and looked at from the whole facility) than new equipment. New should be controlled when it is installed.

Categorical exclusions

- There are different levels of exclusions. For example, some programs only require gas stations to register and report throughput. Registration allows Southwest Clean Air Agency to keep track of where emissions are coming from and the levels. This keeps it less cumbersome for small sources.
- One thing that SCAQMD did in their risk based rules was technology requirements rather than risk. They required that certain categories of business have a certain control technology and did not calculate risk from these businesses. SCAQMD's Rule 219 contains a list of categorical exclusions.
- Diesel particulate matter emissions caused an exceptional workload for Washington. Since diesel PM is a regulated air toxic and the threshold is low, it required stationary diesel emergency generators to go through the risk assessment process, which was costly and time consuming for no public health benefit. In some places, it makes sense where there are large backup generators but in other areas, sources had to spend substantial

money and time for marginal public health benefit. WA needs a different approach for these sources.

- The air toxics permitting program must have some exemptions because some sources have too low a risk.
- There can be difficulty with categorical exemptions. DEQ and OHA need to have an exit ramp where you can treat a facility differently because of extenuating circumstances. For example, one school has an emergency engine for a cell tower but it is located right next to a classroom. Agencies need to be careful with how categories are crafted and how off-ramps are set up.
- Categorical exemptions provide consistency and ease of use, but there should be some way to regulate sources in these categories if needed. If a source meets these conditions, they can be exempt but may be regulated in certain instances.
- Existing sources can cause environmental justice issues since they can be located in EJ areas. DEQ and OHA could be open to criticism if existing sources are not included on the basis of EJ. DEQ and OHA could explore implementation through the lens of the EPA EJ screening tool or any other available tools. A presentation on the EPA EJ screening tool may be beneficial.
- Other possible options or criteria to consider are whether it covers businesses in Oregon

Looking beyond current air toxics permitting program

- Look at sources that don't have permits
- Registration could be used for smaller sources
- There are different ways of bringing sources into the permitting realm, for example, hazardous waste generators.
- Toxics Release Inventory is the most comprehensive source of emissions from businesses that may not be under a permit. It is updated yearly even though some people look at it as just a paper exercise. It's still a good resource to look for potential emitters. Look at facilities that have a higher RSEI (Risk screening environmental indicators) score on permit.
- The hazardous waste program uses RSEI as a tool to prioritize which sources may present hazards but sometimes these are not accurate. TRI is not always accurate. For example, the TRI predicted high manganese levels at Harriet Tubman School, which were not verified and listed Bullseye Glass as having no toxic emissions.

- The first step of an air toxics program has to be assessment of emissions and whether it is a concern for air quality. Looking at what the potential impacts are doesn't guarantee regulation but could help with assessment.

Question about Oregon's existing air toxics permitting program

- Try to develop a manageable program. The existing air toxics program may or may not change after the risk based air toxics program is developed. DEQ has never used the safety net which is for existing process. DEQ may need to modify existing rules if we are adopting a comprehensive approach. The geographic approach is suited for area sources such as commercial and mobile sources.
- The new program can be on a facility category basis or have different levels or guidance specific to a category (risk, technology). There might be a range that exists. DEQ and OHA might be able to tailor existing permitting to what you need in an air toxics program. Build on the existing Oregon framework.
- Oregon's air toxics program is not at the bottom nationwide. It is near the top. The devil is in the details. Don't throw out the good portions of Oregon's existing program.

Follow-up:

- Consider adding toxics to new source review by adding toxics to the criteria pollutant list as SCAQMD did.
- Fix the state spreadsheet for Texas and Minnesota as both states have air toxics programs that go beyond implementing EPA's National Emission Standard for Hazardous Air Pollutants (NESHAPs) program.

Pollutant Scope and Setting Concentration Levels

Pros/Cons of pollutants by significance to public health:

The NATA approach is a good way to start. The HAP list does change over time, so DEQ and OHA would have to update the regulated pollutants in OR. Some pollutants that didn't make the list but could be added in the future are H_2S and diesel PM. DEQ and OHA should make sure to have a provision to update the list of regulated pollutants periodically.

There are some pollutants that are more important than others. DEQ and OHA should consider the number of people affected at unacceptable risk levels for specific pollutants when establishing the list of regulated pollutants.

To know whether an air toxic is of public concern, DEQ and OHA must look at a list of pollutants first and then see if the pollutants pose a risk. This approach assumes that OHA and

DEQ know what level of risk is posed by a given pollutant. Look at the big list of pollutants then whittle it down based on what's emitted in Oregon at levels of public health concern.

DEQ and OHA may want to include pollutants that don't have health data today but may have that health data later suggesting there are health implications. H_2S is a good example. Even though you can't quantify health risk now, you can still include it in the program for potential analysis in the future based on new studies.

Monitoring data is limited to the number and locations of monitors. The analytical methods for quantifying pollutants would also be a limiting factor but these can still be useful in prioritization. In WA, there are many HAPs that aren't on the toxics list but are still controlled through NESHAPs and have health benchmark concentrations. The previous list had more HAPs as placeholders even though they didn't have risk based concentrations by which to compare an acceptable risk to. The current list does not have placeholders.

Chemicals that have risk based screening levels could be a potential option. That's what New York does and it is a highly inclusive list.

SCAQMD has a few different programs. Under existing source regulation AB2588, facilities are required to report every 4 years for the toxics emissions inventory. SCAQMD has a short list, a long list and really a long list. The short list has 23 different toxics that are quite common, such as hexane, benzene, and lead. These pollutants are reported every single year. Every 4 years the longer list (50) of pollutants is reported. Based on that list and prioritization, if further screening shows the need for a health risk assessment, sources are required to submit an even more detailed toxics emissions inventory for 80-100 pollutants have toxicity criteria levels. SCAQMD only has 80-100 pollutants that are emitted at levels of concern. The longer list was developed because they didn't know what was going to be an issue. There can be exotic chemicals related to manufacturing processes but you don't know if these pollutants are emitted and may need more study. Collecting more emissions inventory data helped guide research in the future. Most of toxics work is about 50 pollutants.

One thing DEQ and OHA should think about is doing a longer list but prioritizing that list. As people are looking towards the future in manufacturing, it would be good to know what is coming. It's good to know what's out there. DEQ and OHA need an inventory that can be used when science and health risk catch up.

HAPs are important. SWCAA uses an older version of state rule (5,234 compounds) that still regulates all HAPs. Some pollutants become unregulated or regulated in a different way. When we talk about risks, we can take a lot of different approaches. Modeling and monitoring can miss pollutants. The California prioritized approach is good. One other program might have interesting alternative approach worth mentioning. Michigan says "toxic air contaminants" are regulated until delisted. There are different way of looking at it and it can shift the burden to industry.

Exposure along with toxicity potential should be examined for the pollutant list. In New York they have basic categorization with high, medium and low toxicity. All Persistent,

Bioaccumulating, and Toxic (PBTs) pollutants are included in the New York list. One of the considerations is whether it is a PBT, which affects the uncertainty factors applied when deriving risk based concentrations for those pollutants.

New York's list might have advantages. Time is of the essence in a risk assessment. The last thing you want to do is take a break to do an inventory. If you have inventory in hand, you can do a risk analysis immediately. If NIOSH says a new pollutant is of concern, then you have that data. Phasing in different levels of HAPs is a great idea like SCAQMD did.

There is also a practical side to 1000 or whatever number of compounds is on the list. How do you determine emission rates? Stack testing? Are there lab methods available that can measure compounds? Acrolein is a toxic but how do you measure it? If something is toxic, do you have data that you can look at?

Washington did what they did partly because they did not have to go through the process to derive their own toxicity values and leaned on the expertise of other agencies. This saves time and lends credibility to risk based concentrations. There are three very reputable agencies that have derived these risk based concentrations with input from the scientific community. It makes the list smaller to use risk based concentrations derived by other agencies. DEQ and OHA should be careful of including compounds where there are no risk based concentrations.

If there are no analytical methods to measure concentrations for a chemical like acrolein, sometimes there are emission factors that can be applied. Ultrafine particles is another example. How can you measure to come up with common exposure scenarios? We don't understand all of science yet. We make the best decisions we have at the time and then use new information as it becomes available to make better decisions.

Ultrafine particles are an issue in printing based on what we have learned from indoor air. There are some labs in Europe that can measure ultrafine particles, particularly Germany, but it is still in development. They are not close to being able to translate this from indoor to outdoor air effectively. Ultrafine particles are commonly emitted from cars and trucks and can impact health of people living close by.

It is a difficult concept to use the precautionary principle when the underlying concept is to allow industry to pollute because they need to make a product. Government says companies can pollute within reason. This "within reason" part is where we regulate. The framework of laws and regulations specifies how and how much they can pollute. How can we look at chemicals differently that puts burden on manufacturers and not on agencies?

Averaging times for Risk based Concentrations:

Pros/Cons of short term RBCs?

DEQ and OHA can look at short term risk for residual risk. There are several short term criteria. There are issues with monitoring and modeling in addition to having an inventory to support those risk based concentrations. Inventories are annual averages and wouldn't capture any peaks

and lows. If you assume that annual rate/8760 then you could underestimate or overestimate emissions. For residual risk, you could take annual emissions and use factor of 10 to estimate short term emissions. How do you come up with emissions for short term averaging periods?

The concentration averaging time for SCAQMD is an 8-hour period for short term chronic, repeated exposure, which is a new standard. Short term emission rates have screening assumptions like a 25% bump or something else. For detailed permitting calculations or when doing a health risk assessment for an existing facility, SCAQMD requires a facility to give throughput, hours of operation and emissions data along with substantiation on maximum emission rates, such as whether the process is constant over the year so there is no variation in emissions.

The first thing Washington made a mistake on was when they were revising list of toxic air pollutants, they thought that permit engineers must be so simple minded that they can't handle more than one averaging time per chemical. They came up with hierarchy stating that they were going to take one averaging time per chemical when there could be numerous averaging times. They didn't want to miss acute concerns so they picked a 24-hour averaging time when emission were geared more toward annual averages. This triggered costly review when this may not have been warranted. Engineers can look at a table of multiple averaging times per chemical and adequately address that. In a permitting approach, the application can ask what the operating schedule and conditions are to come up with hourly rate and placed those numbers in permit so they would have to comply with them.

There are chronic and acute hazards identified in different programs. From a toxicology perspective, one workgroup member has more faith in chronic data. Acute toxicity data is limited to certain irritants. Real toxicological data is somewhat limited. Acute toxicity data often comes from and is more frequently applied to occupational exposures. DEQ and OHA should weigh the strength of the short-term toxicity data and use it where it is most appropriate. For certain irritants, acute data can be helpful but not with other air toxics whose health effects are more subtle than acute irritation.

One more point that has to be considered is how we are going to derive or take the values from the different agencies. There are several ways you can get the risk values. Some agencies are slowly moving to use the surrogate approach, if you don't have data for a compound. The surrogate analysis approach is easy to do once you know how to do it and it doesn't need a huge amount of resources.

Risk communication comes up frequently for SCAQMD when it comes to short term risk. If there is a toxicity criteria, then use it. If you don't have toxicity criteria, generally risk from those compounds is not discussed but that doesn't mean there is no risk. If you make a conscious decision not to go with the short term concentration approach, it affects permitting and also responding to incidents. Without short term risk based concentrations, what do you say? You need some thought in how that communication works.

One can find a lot of false positives. The source has to be emitting and someone has to be there breathing. How often does short term thing happen? The meteorology has to be just right. All

these things must align and the probability is pretty slim. If you have a short term issue, you'll see it in complaints and feedback from public.

What are the advantages/limitations of using cancer risk as a basis of short term RBCs?

There is too much uncertainty to take an annual cancer risk and turn it into a short term RBC. There is no biological basis. It's an easy way to get to a number, but not an accurate one. In California, you cannot do cancer risk for less than a 5-7 year exposure. Equating short term with cancer risk is an easy way to get to a number but it's not the right way, it's not how animal studies that underlie the long-term cancer risk numbers were done.

SCAQMD just revised their guidance which now says a cancer risk study is required to look at as short a period as 6 months, potentially as short as 2 months, based on cancer risks for the third trimester. There are practical implications when looking at cancer risk, like from a construction project? How do you predict risk from construction activities?

To derive the chronic risk values, you need 90 day subchronic studies. You need at least 90 days to do the chronic assessment. Using cancer derived risk values to go back and derive acute value is not a good way to go. You can use the non-cancer values because they have biological support from the professional standpoint. Chronic non-cancer may be valid for acute risk based concentration but it varies by contaminant.

How much can DEQ and OHA use the values from other agencies? So many values are too old, up to 30 years. Do you want to just use these values or just use values from 10 years ago? What other criteria do you want to look at?

Follow-up:

- What animal data or human data were used for short term exposure?

PUBLIC COMMENT:

Andy Mecklin: Optical remote sensing expert from Cave Junction and was involved in nasty chemical accident in an oil refinery. Kryptonite. He has concerns on risk assessment – what are chemicals that are causing the most harm. It has to do with toxicity and exposure. DEQ and OHA need a ranking process. The Scientific Review Panel for CARB has transcripts posted online. We do know what the risks are – complaints are the indicator. People complain about the same chemical over and over again, reduced sulfur compounds (H_2S, CS_2 and carbonyl sulfide).

Dale Feik (Hillsboro Air and Water): Concerned about infants. Nanotechnology needs to be addressed and is a major problem if not addressed. Fenceline monitoring. Hydrofluoric acid from Intel should be addressed. Washington is addressing emergency generators that operate once/week to ensure operation. Oregon should do this too and include these emissions. Why do we have ACDPs but not PSD permits? The ALS studies in New Mexico show that people that

live close by have higher incidence of ALS. Need to use precautionary principle and put burden on industry.

Chris Winter (Crag Law Center): Many communities are deeply concerned about flaws in DEQ AQ program. Bullseye glass pulled the curtain back on what was going on. They have been operating across the street from day care for years without pollution control. Many examples around state where impacted communities have complained about chronic exposures but not satisfied with DEQ's actions. They submitted list of names for technical experts for technical workgroup but were not acknowledged and no explanation was given why no one they suggested is on the workgroup. No one on the workgroup has worked with impacted communities. The focus should be put on emission inventory: how to get accurate data. We need ambient monitoring, source testing, and cumulative impacts to show the disparate effects on EJ communities. We need technical expertise on EJ communities. We are going to hear about economic limitations for industry but not the real social and economic impacts on affected communities. We need to help DEQ focus on predicting real risk.

Marilyn Kenniser: Neighbor of fiberglass plant in Corvallis where they make synthetic vitreous fiber, the only plant in North America that does so there is no Best Available Control Technology from other facilities. They are undergoing new permit and have found they were never permitted properly or reported emissions (F, CO, PM) correctly. Now this facility is in the Prevention of Significant Deterioration process and getting a Title V permit. They are located in downtown Corvallis. DEQ is not responsive to neighbors. DEQ should not allow increases in emissions requested. They need to address cumulative effects since the safety net program did not apply. They want monitoring in the neighborhood.

Susan Katz (retired pediatrician, OR physicians for social responsibility): Remember that there is a new chemical safety act, replacing the old Toxic Substances Control Act of the past 40 years. Past monitoring has been deficient. Community has no trust in monitoring. If you don't test, you don't know. Particularly about non-cancer risk and endocrine disruption. There are gaps in data systems. How will new health evidence get into studies? Cohort studies? Comparison of reference values for metals for EPA, CA, OR, and WA.

Jessica Applegate (EPAC): In April when Governor Brown promised Cleaner Air Oregon, she said it was a health based overhaul. Today we have talked about risk based. How do health and risk based compare? There are long term synergistic effects over 18 years. We need more information that would alleviate public panic. Worried about fugitive emissions. Driving around different industry, fenceline monitoring, stack testing. At Bullseye, all doors and windows were open when stack testing. Worried about plant tissue in the garden. People and food they eat need to be tested. Information filtered to public.

Follow-up:

- How to debrief individually?

- Will there be a formal summary of today's meeting? Will the members be able to review the study?
- The Technical Workgroup is here to help DEQ. Do you need different types of feedback to be helpful for DEQ?
- There is a lot of cross over on policy and technology on implementation. Who is on policy workgroup? What kind of feedback do you want from them?