

**MINUTES OF THE MEETING  
OF THE  
ASSEMBLY COMMITTEE ON GOVERNMENT AFFAIRS**

**Eighty-First Session  
May 11, 2021**

The Committee on Government Affairs was called to order by Chair Edgar Flores at 9:07 a.m. on Tuesday, May 11, 2021, Online and in Room 3143 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at [www.leg.state.nv.us/App/NELIS/REL/81st2021](http://www.leg.state.nv.us/App/NELIS/REL/81st2021).

**COMMITTEE MEMBERS PRESENT:**

Assemblyman Edgar Flores, Chair  
Assemblywoman Selena Torres, Vice Chair  
Assemblywoman Natha C. Anderson  
Assemblywoman Annie Black  
Assemblywoman Tracy Brown-May  
Assemblywoman Venicia Considine  
Assemblywoman Jill Dickman  
Assemblywoman Bea Duran  
Assemblyman John Ellison  
Assemblywoman Susie Martinez  
Assemblyman Andy Matthews  
Assemblyman Richard McArthur  
Assemblywoman Clara Thomas

**COMMITTEE MEMBERS ABSENT:**

None

**GUEST LEGISLATORS PRESENT:**

Senator James Ohrenschall, Senate District No. 21  
Senator Fabian Doñate, Senate District No. 10



**STAFF MEMBERS PRESENT:**

Jered McDonald, Committee Policy Analyst  
Erin Sturdivant, Committee Counsel  
Judith Bishop, Committee Manager  
Lindsey Howell, Committee Secretary  
Cheryl Williams, Committee Assistant

**OTHERS PRESENT:**

Lawrence Green, Private Citizen, Las Vegas, Nevada  
Angela O'Callaghan, Associate Professor and Social Horticulture Specialist,  
University of Nevada, Reno  
Tara Pike-Nordstrom, Sustainability Coordinator, University of Nevada, Las Vegas  
Lisa Ortega, Private Citizen, Las Vegas, Nevada  
Michael DeLee, Private Citizen, Pahrump, Nevada  
Christi Cabrera, Policy and Advocacy Director, Nevada Conservation League  
Jessica Clark, Co-Owner, Starseeds, Las Vegas, Nevada  
Stephen Andracki, Private Citizen, Pahrump, Nevada  
Mackensie Warren, representing C & S Waste Solutions  
Edith Duarte, representing Republic Services  
Greg Lovato, Administrator, Division of Environmental Protection, State Department  
of Conservation and Natural Resources  
Teresa Hayes, Environmental Health Program Manager, Division of Public and  
Behavioral Health, Department of Health and Human Services

**Chair Flores:**

[The meeting was called to order. Committee rules and protocol were explained.] Members, as you all know, this week is going to be slightly hectic, so just be prepared for weird hours in case we have to do last-minute adjustments. Specifically, for Friday, I wanted everyone to have a heads-up—we may have to go into a small recess and then come back in the afternoon. Please be prepared to be here all Friday, especially those of you who were thinking of getting an early flight. Please make sure you do not do that, as we may need you. I was not hinting at you, Assemblywoman Black—but I might have been hinting at you. In all seriousness, members, I just want to make sure everybody is here. I do not want anybody to be caught off guard.

On today's agenda we have Senate Bill 349 (1st Reprint). I anticipate a lot of folk wanting to engage in the conversation, both in support, opposition, and the neutral position. For the sake of fairness, we will allocate 30 minutes for each. We will not limit any single speaker. What that means is if there is an individual that takes up 30 minutes of support and makes it difficult for everybody else to participate, so be it. The same is true for opposition and

neutral. I suggest that the support, opposition, and neutral speak to one another so that you can coordinate who is going to say what and that you do not repeat yourselves and take away the opportunity for others to engage. With that, we will go ahead and open up the hearing on Senate Bill 349 (1st Reprint).

**Senate Bill 349 (1st Reprint): Revises provisions relating to public health. (BDR 40-90)**

**Senator James Ohrenschall, Senate District No. 21:**

This is my first time before this Committee this session. It is really an honor and a pleasure to be here. I appreciate your hearing Senate Bill 349 (1st Reprint). Have you thought about what you might have for lunch today? Maybe an orange would be good? Maybe an apple? Delicious, healthy—we want our constituents and our families to eat more healthy food like this. But one thing I have noticed is that when healthy food like this is eaten, we have an orange peel; we have an apple core. Quite often—you know it—it is distressing to me when it ends up in a landfill. The goal of Senate Bill 349 (1st Reprint) is to enable local governments to establish community composting. This happens in other parts of the country, places where people can take food scraps. They can be composted, and then they can be used as fertilizer for community gardens, agriculture, and horticulture. That is especially important in the southern part of the state because our soils are so challenging.

Before I take any more of your time, I would like to go over the road map of who will be with me today because I have some tremendous experts who can speak to the bill. Then, with your permission, I would be happy to answer any questions.

I would like to first turn it over to my colleague, Senator Fabian Doñate, who represents the district next door to me and who was instrumental in the amendment to this bill over in the Senate. Then I would like to turn it over to, either on Zoom or phone, Dr. Larry Green, who is an expert in composting. He is an M.D. and a Ph.D.; he is a scientist. Then I have another scientist and horticulturist, Dr. Angela O'Callaghan from southern Nevada, who should be on Zoom. Here in Carson City, I have Michael DeLee, who is a farmer and an attorney—a former classmate of mine at William S. Boyd School of Law. He is very interested in this bill. Then, with your permission, I would like to turn it over to Tara Pike down in southern Nevada, Lisa Ortega, and Mark Ruben.

I would like to turn it over to Senator Doñate. I will stand by to answer any questions after the presenters are done.

**Senator Fabian Doñate, Senate District No. 10:**

*Buenos días*—good morning to the members of the Assembly Committee on Government Affairs. I represent Senate District 10 in Clark County. I am here today to urge your support of Senate Bill 349 (1st Reprint) and to give you some quick context for the work that was already completed on the Senate side. As the Chair of the Senate Committee on Natural Resources, I worked with Senator Ohrenschall to get this legislation to a good spot.

Many of the concerns that we heard on the Senate side lay upon the reference to fee increases, upending contractual agreements, and changing the definition of what constituted "waste." We added provisions to prevent many of these concerns, which are reflected on the first reprint of this bill. In addition, rather than making this legislation a mandate, we allowed local jurisdictions and counties the opportunity to pursue what would be considered a composting zone. If city or county officials desired to make a particular open space into an urban gardening and composting designated area for the local neighborhood to share plots of land, they would have the power to do so.

You may hear statements today that part of this legislation is not necessary or that local jurisdictions may already have the power to do this. I challenge that statement by pointing to a real-life example with regards to how we approach recycling. There is an uncertainty that lies between the differential powers observed by a city and their respective county government, which could potentially create a conflict. I worked with my legal counsel to address these concerns, and that is what is reflected on the first reprint. Passing this legislation codifies in statute that we want to encourage local composting and support a pathway to urban gardening.

Today, Nevada is listed as one of the worst states suffering from food insecurity, and we know that this systemic problem has been intensified with the COVID-19 pandemic. In Clark County, many of my constituents are forced to live in situations known as either "food deserts" or "food swamps," terms utilized to signify a limited access to a variety of healthy foods. Given my public health background, I believe it safe to say that our families deserve access to locally grown, healthy foods, and S.B. 349 (R1) is the first step to accomplishing that.

Thank you, and I will turn it back to the presenters.

**Chair Flores:**

I will say publicly that I know you have worked very hard on this bill. Thank you for working alongside Senator Ohrenschall.

**Senator Ohrenschall:**

Chair Flores, with your permission, I believe we have Dr. Larry Green either on Zoom or on the telephone. He does have a presentation [[Exhibit C](#)].

**Lawrence Green, Private Citizen, Las Vegas, Nevada:**

I am sorry. The video camera I have seems to be defective. I want to start out by first thanking you for the opportunity to speak. I am volunteering the information I have based on 40 years of research. I have an M.D. and a Ph.D., and I have been involved in the bioscience sector for well over 50 years. I really want to address the whole issue of waste and waste management. I am very open to questions offline, as well. You may want to get ahold of me later if you have some questions. I want to focus on some basic issues starting right out.

The term "compost," as it is commonly used by most people, is sort of a generic term that suggests that you are taking food waste or green waste and breaking it down into something that is useful. Ultimately, it is probably going to end up in the soil. If you want to know how much food waste is being generated, there is a very simple formula. There is one pound per person per day every place in the world. That is such a simple formula, so well-established that you can take any city or any town—whether it is urban, rural, or wherever you are—if you know the population, you can calculate how many pounds—tons—per day are going to be generated. We are drowning in food waste.

We really should not call it waste because food scraps, or the base material that ends up in a garbage can, might get sent to a landfill. It might be sent to an anaerobic digester. It might be a large commercial composter operation. But it turns out that food material can be used in local composting called bokashi—bokashi fermenting. You all know what fermenting is because you are probably familiar with yogurt and sourdough bread. Maybe some of you know a little bit about kimchi. The only difference between traditional composting and bokashi is primarily this: is it occurring with or without oxygen? That turns out to be extremely interesting and very important. It is really quite exciting because most people in the United States—until, I would say, the last few years—were not really aware that there is an alternative to oxidation, which is what composting is.

Composting is actually difficult to do. You have to be [unintelligible]. Traditional composting is difficult because you have a carbon-nitrogen ratio that has to be set fairly close to a proper ratio. The humidity is enforced. Then it heats up in a pile. Everyone who has tried to do composting knows that it is a little bit difficult. Professionals can do it, but it takes a lot of space and a lot of equipment, and it costs a lot of money to do it. And at the end of the process, if you observe what happened, your pile has shrunk down by about 50 percent. The reason for that is because during oxidation, the organisms that are involved in that process and heating up the pile are driving water vapor, nitrogen, carbon in the form of carbon dioxide, and many other pollutants into the atmosphere. What you are ending up with is a pile of material that we call compost. There is a very interesting thing about it. Because it is heated up, most of the microflora, including beneficial microflora that might have been present and helpful for the soil, has been destroyed.

What I am interested in is bringing the soil back to life. I am also interested in handling our waste in a much more efficient way. It turns out that if you do the same process using microflora and fungi that are derived from the soil as the material that is going to cause the fermentation, and you exclude oxygen, the process is extremely efficient. It only takes two weeks, and in that two-week period, you have no oxidation, no gases being formed. There is hardly any measurable carbon dioxide. There is no methane. There is no nitrogen gas escaping. It may seem trivial, but water is important too. One hundred percent of the water is retained. I am going to call it pickling your food waste, because that is what you are really doing. When you do this pickling process—fermentation process—you end up with something that weighs virtually the same as what we started with. There is no loss of weight. You have literally twice as much mass of material to return to the soil.

The other exciting thing about the fermentation is that it kills pathogens. It kills salmonella, listeria, and e. coli in a matter of less than 48 hours from the start. It only takes two weeks to get to the end point. You have a very fast turnover of high-value product that you end up with that can go back to the soil. In that process, you have increased the population of diverse, very beneficial microflora that live in the soil, which are normally starving all the time. Because there are so many of these organisms going back into the soil, and they have water retained within their cellular structure, you are actually increasing the water content of the soil as well.

There is one other interesting thing that is happening with fermentation—what we call bokashi, which is a Japanese word that means fermented organic material. The other interesting thing happening is that in the fermentation process, we are building extremely valuable small molecules—some of them large molecules—that are beneficial to plants. Here are some examples: Humic acid; folic acid; a number of plant hormones; hormones called auxin, which help plants grow more efficiently; and gibberellins. Gibberellins are complex molecules that actually increase the productivity of plants; the yields; and the architectural structure of the plant, making it healthier. When you take that fermented material and return it to the soil, the other benefit is that it excludes the open spaces where opportunistic organisms can get in and do crop damage or damage to your vegetable garden, fruit trees, or whatever you have.

What I am really saying here is that although you might call it composting—and it is, by the layman's definition of composting via food waste—it is not the same as the oxidized material that you normally see when people talk about composting. You get much more value back into your soil. It is my experience that, around the world, many people are doing this all the time, every day. They have learned that this is a better way to treat the soil and bring it back to life. That is the other thing to remember: soil is a living thing. You could improve your soil content very rapidly, literally overnight, once you start this process. You could reduce the greenhouse gas production—put all the heat, water vapor, nitrogen, and carbon dioxide going to the atmosphere back into the soil. You attract other organisms, such as earthworms that make castings, and all kinds of things that are living in the soil back to that soil to improve your plant performance and your yields.

This is something that does not cost much at all. In fact, it is extremely inexpensive. It only takes the culture media and a container that excludes the oxygen. The footprint of the process is very small compared to composting, which takes up a lot of land. It is ideal. It is almost perfect for our families, homegrowers, and small communities that might have a pea pod garden. They can take that waste that comes out of their garden that is not good enough—maybe it is rotted and was left too long—they can add that and cycle it right back into the soil. What you are really doing is closing the loop from the farm to the plant or the food consumer. Normally, what happens after that is that the food waste ends up going to a landfill, animal digestion, or a compost facility. Most people just do not know that there is this other alternative, and it is easy to do. You do not have to be very smart about it. The microbes know what to do—they are hungry.

I am just going to say one more bit about how the mechanism works; I know time is precious. It is pretty fascinating. As the material is fermenting—or pickling—it is actually consuming the sugars and forming small acids. They are called carboxylic acids. These carboxylic acids are making the pH go lower, making the material more acidic. They drop that pH down to about 4.5. The reason they do that is because most food waste is a substance called cellulose. It is hard to break down. But the ideal enzymatic activity, the peak activity, is around pH 4.5. When you do this process, what you are really doing is mimicking nature. This is what evolved over millions of years, and it is the most ideal way to keep the soil healthy.

The last thing I will say for the moment is that if you were going to walk into a jungle or a forest anywhere, you will not find any rotting, stinking odor. You will not find piles of material with rats digging into it. You will not find coliforms, salmonella, and listeria brooding on the surface or festering in the water supply. When you ferment, and you do it the way nature does it, you actually destroy those organisms because they cannot compete in that environment where the acid is higher and there is no oxygen. You do get that problem when you do compost. One of the serious problems of composting is that you have to check that over.

I guess the other thing I would say is that there are some environmental impacts that we can summarize with. I am going to drop through them a little bit. The first one I am going to talk about is the air quality. I just mentioned that with fermenting, you do not produce noxious gases. You do not heat up the atmosphere, you do not lose water into the atmosphere, and you do not get that rotting, putrefaction odor that comes around from compost sites in general.

What about water conservation? It is important—maybe not in some areas—but in many areas in the Southeast and Southwest, the cost to a grower to get water is very high. If you can put water back into the soil that came from the food waste, and you can do it locally, that is fantastic. But what about that water quality? If you take a lot of water, it is contaminated with chemicals, pesticides, fertilizers, and other things that are problematic. But when you recycle with fermenting, you do not have to use any pesticides. You do not have to use any chemical fertilizers. It is the natural recycling of the trace elements: the nitrogen, the phosphorus, and all the other materials, plus the beneficial microbes that are giving you value. As far as that goes, what you have just done there is minimized demand for using fertilizers derived from petroleum. Those fertilizers do not stay in the soil. Normally, they will just run right with the water once you put them in. They are not very stable. But in the fermenting process, when you produce the microflora that are beneficial and all these other plant hormones that have a relationship with plant roots and feed the plants, you maintain the material in the soil. It does not run off.

Then there is the issue of when you have to transport and carry things. The one thing I would say there is that I do not think any amateur, or any person, should be moving large quantities of food waste because it is dangerous. It actually is contaminated—always contaminated—with potential toxic pathogens. But if you are putting it in a local garden and you are just

fermenting right at your home or right in the area where your garden is, it is very safe. It is easy to do, and you are not going to miss. As long as you put the oxygen out of the system, you are going to get what you want.

What we are doing is using the land much more efficiently when we return the waste that has been fertilized and fermented on that land. We are minimizing our consumption of water and actually reducing the air pollution and the heating up of the atmosphere. Soil fertility is being returned; the soil is alive. I think it is an ideal way to process material. I can just tell you from my own experience all around the world that I have people from Iceland to Australia, all across Canada and the U.S., and even parts of Europe and Africa who are doing this process. That is what I have been involved in for many years now—teaching people the process, showing them how easy it is, and getting the research behind it that supports and documents it. We have lots of data on that.

I will stop at this point and open it up for any questions. I know I ran through a lot of material there, but the bottom line to remember is that traditional composting involves oxidation. It produces a very different process. It results in a loss of mass; it reduces a lot of the valuable material that could have gone right into the ground. It is not something that a normal person can do easily. On the other hand, bokashi, which is called acidic anaerobic fermentation, can be done by anyone very simply. It does not require a lot of training or a lot of equipment. It is very cost-effective, and it is fast. Let us leave it at that point. There is a lot of material to cover, and I want the others to have a chance to make their discussion as well. I am more than happy to answer questions. Thank you very much.

**Chair Flores:**

We will continue down here with Senator Ohrenschall so we can continue the presentation. I know you have at least one more speaker. Is that correct?

**Senator Ohrenschall:**

Yes. Dr. Angela O'Callaghan is on Zoom. On Zoom, we also have Tara Pike, Lisa Ortega, and then here in Carson City, Michael DeLee. And thank you, Dr. Green, for all that tremendous information.

**Angela O'Callaghan, Associate Professor and Social Horticulture Specialist, University of Nevada, Reno:**

I appreciate being asked to support this really important bill. My doctorate is in horticulture, and my areas of expertise include these: I have the Master Gardener Program of southern Nevada; Youth Horticulture, which teaches children from Pre-K to post-high school; and Community Horticulture Education, which covers teaching individual people who want to grow plants. I am also involved in training regional landscape professionals in pesticide safety. I also teach, among other things, composting for residents, for local people who are trying to simply do something about the garbage they do not want to be putting out there—garbage that could maybe actually be used.



Many local gardeners have been told that composting is impossible here in Nevada. Of course, that is obviously not true. When I first arrived here, which is now 20 years ago, I was told, Well, you cannot grow vegetables in Nevada. Imagine my surprise. I have lived here, as I said, over 20 years. Over those 20 years, I have seen the interest in urban agriculture and urban horticulture just expanded so much. That is despite the fact that we do live in the smallest, driest desert in North America. I am located in southern Nevada and anybody who has ever tried to dig a hole in the ground in southern Nevada knows that our soils tend to be significantly less than fertile.

But we can improve them, and we can improve them by adding the organic matter that is the end product of any composting program, whether it be anaerobic fermentation or aerobic composting. Whichever way, the end product is something that is going to improve our soils. This is really important because when we improve our soils, we are also improving their water-holding capacity and their drainage. You may or may not be familiar with the idea that the number one reason that plants die—anywhere, not just in Nevada—is because of a lack of drainage. Our soils tend to have a little bit of nasty dirt and then a big, hard rocky portion underneath. Improving the soil actually helps to break down a lot of the stuff that we would otherwise be trying to deal with. It also helps with water-holding capacity, so we can irrigate somewhat less if we have enough water being held in the soil—but not so much that we are flooding the plants. It is a perfect, perfect balance that is provided by adding organic matter. When I say "organic matter," I mean the end product of any composting, aerobic or anaerobic.

When you think about it, technically, we have been in a drought for 20 years, at least in southern Nevada. This was information that I got from the National Oceanographic and Atmospheric Administration. They said, Yeah, 20 years you have been in a drought. That is a lot, and we need to hold on to whatever water we can get.

As I said, our soils are, at best, problematic—at worst, almost impossible. Growing food is not something we can do easily here, but we can do it. We can do it using the materials that we already have and that we generate on a daily basis. We are a state with about 3 million people, and Dr. Green just stated this: one pound of waste per person per day. That is a lot of garbage. That is a lot of stuff that can be, ultimately, degraded into something that is going to improve our soils. If this bill passes, it is going to be a major benefit for all of us who are interested in local food production and in improving the nutritional status of our population. We have elderly people who are living in food deserts; we have children who are living in food deserts. But we are also able to improve their access to food by locally growing foods.

This is not going to be a huge program. If this bill passes, it is going to be a wonderful demonstration of what can be done for people living in a desert. We have enough materials that could generate it, that can be broken down. From there, those materials can be used to improve the soils in local farms—and we do have some, even here in southern Nevada. Local farms can have their soils improved, but also, some of the materials can be used in community gardens because, as I said, there is a lot of interest in urban agriculture.

According to some experts, they are looking at the expansion of community gardens. We have over 80 of them here just in the Las Vegas area. We have community gardens. We can actually improve the growing of food for people who are senior citizens and children. As I said, we have about 80 community gardens. There are over 100 school gardens.

Everybody needs to eat, and there are so many people interested in growing their own food. Why not use something that is free? It is something that is not going to stink because this process that Dr. Green was describing is enclosed. It is an enclosed system. Nothing is escaping, including smells, which is something that some people are concerned about. Whenever they hear "composting," the first thing is, Oh, no composting, because of the stench. No, not if it is oxidized properly. Then again, in an enclosed system, there is absolutely no potential for stench because you have that stuff in a container; it is enclosed. Until it is finished, until that whole process is done, it is not opened. When that process is finished, there is no stench. It is a very big deal.

Local governments have control over this process in this bill. It is not going to be taking any of the authority from local governments, but it is going to be giving them the green light for improving what they already want to do. We want to be more self-supporting in terms of our food production, and making this an important part of our horticulture/agricultural efforts for Nevada is a really important way that we can do it. That is all the time I am going to take. Thank you very much for listening.

**Senator Ohrenschall:**

Next, I believe we have Tara Pike on Zoom, as well as Lisa Ortega.

**Tara Pike-Nordstrom, Sustainability Coordinator, University of Nevada, Las Vegas:**

I am the founder of the University of Nevada, Las Vegas (UNLV) recycling program. I started that back in 1995. It was at a time when there was not a lot of recycling happening in Las Vegas—there was some, but not to the level we have today, which is impressive in my opinion. When I talk about, or think about, organic waste, I am always looking at it from the perspective of keeping the material out of the landfill and getting it back into beneficial use. With organic waste, it has always been a passion of mine to keep that material out of the landfill. I have been composting in my backyard for at least 15 years. Currently, I have a large composting system in which I use a tractor. I have two and a half acres and some animals, so I like to compost their manure. At my house, I am only able to compost what I generate at my house. I do not know if that is a law; it is what the health district told me. As a person composting in my backyard, I cannot accept waste from any other people—neighbors, friends, nobody. It has to just be what I generate on my property.

I also have an in-vessel composter at UNLV. Again, there is the same situation: In that unit, I can only accept or compost what is generated at UNLV. That is fine. I am not complaining about that in any way, shape, or form. I am glad to have the opportunity to be able to compost at UNLV and at my home. But I think when you talk about other communities of a similar size or smaller than Las Vegas or Reno, they have organic waste collection; they have either curbside or drop-offs. We can do it in Las Vegas, in Reno, in Nevada as long as we

have the laws and the ability to do it. I do not think, at this point, we have that ability. I hope that you consider that when you are voting on this. You are opening up an opportunity for our communities to decide what they want to do with organic material.

Bowling Green, Ohio, just launched a six-month pilot program. Pilot programs are wonderful because you can decide, if it does not work out, to end the program. This bill would give us the opportunity in Nevada to do something like this. It is a six-month pilot program where residents can drop off food and landscape waste. That is a great program that has been put in place by Bowling Green.

Republic Services adapts to laws and organic waste bans across the country. States like Connecticut, Vermont, Massachusetts, California, Rhode Island, and New York—specifically New York City—have lots of laws regarding organic waste material, keeping it out of the landfill. Republic Services services these areas, and they have adapted to that. They can do that in Nevada, as well. They did win the 2020 Organics Recycler of the Year award from the Nation Waste & Recycling Association, obviously for work they have done across the country. I hope they will be supportive of this in a way that helps move Las Vegas, Nevada, the Reno area, and other parts of our state so that they can win in 2021 as well, because we deserve it. We deserve to be able to have residents decide what they want to do with their organic material.

I know one of the arguments that they and others will make is that, Well, we make electricity from the methane generated at the landfill. I do not think that something like this is going to change their ability to make electricity at the landfill. There are still going to be millions of tons of organic material heading to landfills and into Apex. This is probably only going to be a tiny little chunk of organic waste that is going to get diverted as a result of this bill. But that tiny chunk makes a big difference, and it is a big deal for the people who want to participate in something like this, who want to make soil, and who want to keep their food waste out of the landfill. I think it is an important thing to provide the opportunity to our local governments to make decisions on creating programs like this for the residents.

**Senator Ohrenschall:**

I want to salute Tara Pike because for many years, recycling was a challenge before we had curbside. She started the Rebel Recycling program at UNLV, which allowed many of us to take our recyclables down to UNLV and drop them off so that they could be recycled. I certainly participated in that for quite a while; the apartment complex where I lived did not have curbside recycling. Boy, just imagine how great it would be if organic material, food scraps, could also be taken to a central location like Rebel Recycling has at UNLV. I definitely want to salute Tara Pike.

Now I would like to see if Lisa Ortega is on Zoom.

**Lisa Ortega, Private Citizen, Las Vegas, Nevada:**

I am a Master Arborist and conservationist. I am a member of the Sierra Club Southern Nevada Group Executive Committee.

Put simply, composting is the process of recycling your unwanted organic trash and waste, turning it into a soil amendment which can be rich in the nutrients that plants need to grow. By creating a specific area for all your organic waste to compost together, you can ensure that only usable soil is created. This waste will decompose over time and turn into compost or soil that you can use in local gardening. An urban composting zone helps neighbors in the community in a community effort toward a greater self-sufficiency when growing our own produce right in our own backyards.

Nevada heat is good for compost. It helps it to decompose quickly and turns trash into usable compost. What is more, our area is short on this kind of quality soil as you heard. The need for composting is often much higher in dry spaces. If you live in the desert, you may know how difficult it is to plant and grow certain vegetables, fruits, and flowers. Often, compost that has been created is the best and potentially the only way to make sure you are getting the nutrients to things that you want to grow, and increase the chances of a beautiful garden or fruitful crop for residents in Nevada.

Food scraps in the trash contribute to high concentrations of methane, which contribute to greenhouse gas emissions. With community composting opportunities, emissions can be reduced before landfill disposal. With recycle rates being low from unclean recycled material, this endeavor will help the state with cleaner recycling—minus these scraps—and help the state reach its recycling trash goals.

I would like to thank you all for taking one sustainable step at a time for a sustainable Nevada.

**Senator Ohrenschall:**

I believe Mark Ruben is on Zoom—I hope. And Chair Flores, for the record, with Tara Pike, there was a kitty copresenting who I do not think put his name on the record.

Perhaps Mark Ruben is on the phone? If he is not here, I can turn it over to Michael DeLee, who is here in Carson City.

**Chair Flores:**

Please, let us do that.

**Michael DeLee, Private Citizen, Pahrump, Nevada:**

It is a shame we did not hear from Mark Ruben from Gilcrease Orchard in Las Vegas. He is such an icon there, and they do so much there with both composting and, of course, community gardening. Perhaps we will hear from him at some other time, but what a great example of what you can actually do in southern Nevada when you put your mind to it.

I know our time is limited. I just wanted to briefly address a couple of points from these excellent speakers this morning. I grew up in Los Angeles in the 1970s, and it was hard to breathe. I lived through that. It is different now, and there are a lot more people there. We

can change; we can make changes if we put our mind to it. At some point 20 or 30 years ago, people laughed when you said solar. Now look at Nevada and solar. We can make a difference. This is how it starts.

I tried to speak to many of you, and I did not get to everybody; I apologize. But there was one thing I did see on a board in one of your offices, and that is this: You do not move mountains without earthquakes. Let this bill be that earthquake that moves us to the direction we need to go. You are going to hear that we do not need the bill. We do need the bill; we need a very loud and clear message to be sent to the community because you are hearing from the community. You are seeing the posts from all of your constituents across the state of just how badly this is needed. It is your voice that needs to go to the other facets of the administration—to the cities, to the counties, to our state administrators—and say, Please, make this happen; we are not telling you that you have to do it. It is a permissive bill. We are giving the guidance based upon established science in other parts of the world and other parts of the country. I hope that you can see the need for that.

If you actually read the text of the bill, it is very innocuous. I realize it probably did not start out that way, and we have dragged along some of the opposition because of that. But it is very innocuous. It gets us to where we need to be. Specifically, composting right now is defined in the regulations—I get that. It is a very loose definition under *Nevada Administrative Code* (NAC) 444.572. You will hear more about that later, I am sure. It is basically anything that breaks stuff down. That is fine, but right now, there is a built-in opposition and Not in My Backyard syndrome to a lot of this because of what that has represented for a lot of people. That is why we need to send the message that there is acidic, anaerobic fermentation. It is composting, if you define it very broadly, but it is not if you define it as against what composting is traditionally thought of. By writing that in as an option, as something we need to be considering for our cities and counties, and as something they should specifically be looking at for zoning, we are leading them. We are providing the leadership that everybody is telling us to provide, and we are doing our job.

Finally, what is it that you can do in a condo, an apartment, or a homeowners' association (HOA) to make a difference right now? How can you think globally and act locally? In many ways, you simply cannot. But with this, you can because for a five-gallon bucket, which is how you would typically do a bokashi composting method, the average homeowner, the average tenant, the average child can make a very real and local difference. They can bring something to a local facility that is set up by a city or county. It can make a difference to local farms—hopefully, we will see some community farming bills coming through the Legislature, the other half of this. But without benefiting the soil, it is not going to get very far. We have heard a lot about farm to table. This is table to farm. I thank you for your support.

**Chair Flores:**

Thank you for reaching out to the members preemptively and the conversations we had in the days prior. Senator Ohrenschall, please.

**Senator Ohrenschall:**

If Mark Ruben is on Zoom or phone, he was our last presenter I had on the list. But if he is not here, I am happy to answer any questions.

**Chair Flores:**

I do not believe I see him on my end. I am checking through our system. We are just getting confirmation that unfortunately, he is not on. I do see him registered, but I do not believe he is on.

**Senator Ohrenschall:**

Thank you for checking, Chair Flores.

**Chair Flores:**

With that, we will go ahead and open it up for questions.

**Assemblyman Matthews:**

My question—or I guess my concern or issue—with the bill would just be this: Why is there a need for this to be addressed at the state level with a top-down approach, as opposed to just allowing for this to be dealt with locally through local ordinance, reflecting the vast array of communities that we have in the state? Just for one example, it seems this bill would define in statute—I think for the first time—the term "composting" specifically and narrowly. As we know, as with any sector or technology, there are always innovations going on. My thinking would be that we may want to afford more room for flexibility and that kind of innovation locally. I guess a way of forming the question would be this: What would be the problem with allowing this to simply be dealt with at the county or local level in order to allow policy to reflect the particular concerns and needs of the community?

**Senator Ohrenschall:**

Certainly, I think if you look at our state and where we are in composting and the status quo, and you look at states across the country and where they are—say you go visit a friend in Minnesota—Minnesota has urban community composting where you take food scraps to a central location. Maybe you are tired when you get off your shift, cooking dinner for your family, and you just do not have the energy to do your own compost pile. This makes it a little easier on you. Unfortunately, I think the status quo is not working. It is not helping us try to divert organic waste—I hate to call it waste—things that could enrich our soil and help our community from going to the landfill, and from being composted. I believe this bill, Senate Bill 349 (1st Reprint), is crafted in a way which does not force any community to do anything. It is enabling language if a community chooses to pursue an urban community composting zone. The reason behind pursuing the bokashi method is that it seemed like it had the fewest side effects in terms of odor or any danger of bugs, mice, or rats attacking the composting pile. Certainly, I think composting of all kinds is great, and I am glad that the regulation currently allows composting of all kinds. In this bill, the reason I went with that bokashi method was to try to have the least impact on communities. I think, Chair Flores, if there is a little more explanation of bokashi—if Dr. O'Callaghan is still on, to quote your colleague over in the Judiciary Committee, may I Zoom a friend?

**Chair Flores:**  
Please.

**Senator Ohrenschall:**

Dr. O'Callaghan, SOS, if you are still there. Maybe I can ask Mr. DeLee to come up and give a little more information on that.

**Michael DeLee:**

Senate Bill 349 (1st Reprint) does not mandate anything, and it does not change any definitions in code. It does not create any limits. It leads the way; it provides leadership to implement acidic, anaerobic fermentation as a model. In theory, yes, somebody could do traditional composting, but as noted by the facts on the ground, they are just not. Given the distance limitations that are already written into the ordinances, particularly in Clark County, it is pretty much impossible. Plus, given the reality of HOA living, apartment living, condo living, it is physically impossible.

Community sites are necessary, rather than taking something all the way to the northwest side of town, in the case of Las Vegas—we have to do something about that. There is really not a limitation, yet there is still a need for leadership on this issue. To simply say, Well, I think we can do it now under the current paradigm—it has not happened. There are a lot of built-in problems. By sending a message with the statute, the way we have it written today, I think that gets us to where we need to be. But it is not going to happen overnight because this opens the door for cities and counties to hopefully walk through. Frankly, we are going to have this presentation again in each one of our cities and counties to try to get us there. That is all we can hope to do.

**Assemblywoman Brown-May:**

Thank you, Senator Ohrenschall, for presenting such an insightful bill. I am the sister of a farmer in Massachusetts, and I am very familiar with farmers' composting. I appreciate that this is enabling language to move into our cities and counties. My question is relative to section 5.5. As we get into the subsections, it says here in subsection 1 that "The governing body of a city may, by ordinance"—so we give enabling language. But then, subsection 1, paragraph (b) says, "Must require that promptly after any compostable materials have been sealed . . . must be delivered." I am curious to know if you can talk a little bit about who would be "A holder of a certificate as an actual producer of farm products," and then "person or operation certified." What do you need to do in order to be certified; do you have any idea what that looks like? What is the scope of that certification?

**Senator Ohrenschall:**

Certainly. The certification in *Nevada Revised Statutes* (NRS) 576.128 comes from the State Department of Agriculture. That is certification as an actual producer of certain farm products. It is someone who is certified in agriculture and in farming. Then the reference to Title 7 *Code of Federal Regulations* Part 205 is the National Organic Program. That would be someone who has that certification from the federal government as an organic grower.

**Assemblywoman Brown-May:**

Just to clarify, we are really trying to provide an opportunity for members of our broad community to be able to bring their recyclable, compostable materials to a centralized location. Once they are in a container, have fermented for a specific amount of time, and are ready to be utilized within soils, that product must then be delivered to that authorized, certified farm or person. Is that correct?

**Senator Ohrenschall:**

That is correct. If I can tag in Mr. DeLee, I think he might have some more information to clarify it.

**Michael DeLee:**

The objective of this language is to make sure that these materials do not just sit there, because the last thing you want to do is have something that is of value go to waste. We do not want it to be waste. We want it to get into the food production cycle; the whole reason for doing this is to get it into our soil. When we are talking about food production in Nevada, you do not just produce something and then take it out to a community. You have producer certificates from the State Department of Agriculture, and you have the National Organic Program. They overlap a bit, but you can have one and not the other in some cases.

We want monitoring at all levels. This is not about going around or exempting out of regulations and statutes. This is about creating an ecosystem, to use an analogy, of statutes that encourage a local food web. We want this to get processed, acidic anaerobic fermentation, and then moved out to facilities—hopefully, community gardens. We have some other legislation that is hopefully going to make it through, such as Senate Bill 297 and other examples of community and urban farming bills. Elsewhere in this, it talks about authorizing some zoning changes we need for community composting. We would like to see those things happen for urban farming. The purpose, specifically of these two, the first and NRS 576.128, is somebody that has a producer certificate, which is very easy to get. You call the State Department of Agriculture and let them know the information; I think it is \$50. They just want to get you into the system so that if there is ever a problem, they can trace it back from a farmers' market, a store, or a restaurant to where it was produced. Similarly, with the National Organic Program, we would like to see a little bit more of that in Nevada. Hopefully, we will have that again. But there is a federal set of regulations that covers that. Under each one, that is the end result. Hopefully, those will be within our cities as well. I hope that answers your question.

**Assemblywoman Brown-May:**

I would like to follow up on one statement you just made. I just want to be really clear that community gardens could indeed be the recipients of these compostable materials as a certified entity to receive that.



**Michael DeLee:**

Absolutely. We want the community gardens to be producers and get that out to the public and into the market as much as possible to diversify our economy in that way. That is absolutely what we intend here.

**Assemblywoman Considine:**

Thank you, Senator Ohrenschall and all of your presenters, for bringing this bill forward and for pushing forward composting. My question is a little along the lines of my colleague Assemblywoman Brown-May. Thank you for clarifying that an individual who wants to do their own composting is still allowed to do that; I appreciate that. But then, if this bill were to go in and if a community were to follow the guidance, my questions are these: If somebody wants to keep all the material that would be eligible for this in a different sort of way, are they able to bring it to these community compost locations? Or in order to bring it to this community compost location, are they required to follow this fermentation process?

**Senator Ohrenschall:**

The way I envision the bill is that people could drop off the food scraps, take the orange peel and the apple core to the community composting location, and then it turns into fertilizer that can be used by a community garden or by an agricultural grower or organic grower. I have had good intentions to start composting for years, but unfortunately, I have not started—that can happen. For folks who just have good intentions, these scraps will be diverted from going into the landfill and can help all of us, I think.

**Assemblywoman Considine:**

Following up with Senator Ohrenschall's line of thinking, a lot of people might have intentions, and it might just be easier for them to have, for example, a bucket where they throw things and then bring it weekly, as opposed to following something that might be a little bit more complicated.

**Senator Ohrenschall:**

Can Mr. DeLee jump in? I think maybe he can clarify things.

**Michael DeLee:**

I just wanted to clarify that there are a lot of ways this could work. A lot of people are very busy and might not be able to bring it somewhere. The details of how it is going to work in each city and county is, of course, going to be left up to the ordinance process in each city and county. This opens the door to it, gives some broad brushstrokes, and outlines some very sound science that we have heard today that supports this. But every community is going to be a bit different as to how it approaches this. The most important thing that you heard, of course, was keeping it away from oxygen, keeping it sealed. That is going to get the fermentation process going. Otherwise, you are going to have the putrefaction process, which is something you do not want with this. Those specifics are going to have to be dealt with in the regulation process. Of course, we look forward to working at the state level, because I think it might be beneficial to take another look at some of the state regulations for this as well. We are just opening the door today.

**Assemblywoman Dickman:**

My question has to do with section 2, subsection 3. Did I miss the explanation of the purpose of that part of the bill, the part about the State Board of Health and regulations of farmers' markets? Does that tie into the composting or is that a separate idea?

**Senator Ohrenschall:**

In the original bill, this was to facilitate certain locally grown produce getting to market, try to help local growers get produce to market, and remove what I believe was a barrier. This part, through the amendment process, is still there. I still believe this would be a benefit to local growers to get food to farmers' markets and to be able to sell locally grown produce. If some of the fertilizer that is made from compost from people's food scraps helps some of that grow, then that would be great. I think, if there is any additional explanation, I can ask Mr. DeLee to jump in. But that is my intent.

**Michael DeLee:**

I probably could not say anything better than a supporting letter that was introduced March 30 from the Sierra Club that goes into detail on specifically this point, about some of the challenges that we are seeing in terms of requirements. What you might think of as maybe apples or something would have to be put in packages in order to be sold at farmers' markets. It seemed a little bit confusing. I know there were some concerns about that. Nevada has a little bit different approach to some agriculture than our neighboring states. For example, I think pistachios are considered a highly processed food in Nevada, as opposed to, say, California, where you can buy them a little more openly. I think this encourages us to take a different look at that, particularly where you are dealing with farmers' markets, which are expected to be a little more accessible.

**Assemblywoman Dickman:**

I was hoping that was what this did, as opposed to creating more regulations, when it says, "may adopt regulations." I appreciate the clarification.

**Senator Ohrenschall:**

Certainly. In the part of the bill where I talk about a composting zone that a city or county can establish by ordinance, I am not talking about new zoning regulations or anything that would need to go before a zoning board, but something that they would establish through their local ordinance after public hearings.

**Chair Flores:**

Members, are there any additional questions? [There were none.] Thank you again for that very thorough presentation. At this time, we will go to those wishing to testify in support of Senate Bill 349 (1st Reprint). I do not believe we have anybody present in the room or via Zoom, so we will open it up to the phone lines.

**Christi Cabrera, Policy and Advocacy Director, Nevada Conservation League:**

We are here in support of S.B. 349 (R1). The food system contributes between 20 percent and 30 percent of global climate pollution. We can reduce that pollution by expanding urban agriculture, farm-to-consumer sales, and composting. I think the bill presenters did a great job of going over all the benefits of this bill, so I will just say that we are in strong support, and we urge the Committee's support. Thank you.

**Jessica Clark, Co-Owner, Starseeds, Las Vegas, Nevada:**

We are an urban farm located in downtown Las Vegas. We also have a food truck where we serve some of our locally grown produce in salads, sandwiches, and wraps. We currently use a compost service called Viva La Compost. They pick up our compost—our waste, which includes waste from our growing and also our produce waste and some of our salads and juices—at a cost. We are a minimal-waste, and hopefully in the future a zero-waste, sustainable business. We use the service biweekly; we trade two five-pound buckets, and she hauls them to the only certified local compost in Las Vegas. Then that in turn gets sold to Star Nursery. What we would like to have is the option to give our food waste and our production waste to a local farm that we work with, instead of having it used for landscaping and Star Nursery. To have that choice would be really important to us. There are a lot of community gardens that we work with and a lot of farms that we work with. We are trying really hard in Las Vegas to create a local sustainable food source. Currently, with the regulations that we are facing, we are unable to do that. Passing this bill would mean a lot for my small business; it would mean a lot for other small businesses, such as Viva La Compost; and I think there are other juice bars. That is with other places that would like the option to give the waste to a farm to create food, versus to grow palm trees or for landscaping for residential neighborhoods. Thank you.

**Stephen Andracki, Private Citizen, Pahrump, Nevada:**

I am a medical doctor and a farmer. Thank you, Senator Ohrenschall, and all the Committee members, for allowing me to give testimony in support of this bill. I would like to take a little bit different approach. This is based upon the extensive experience that I have with both farming and medicine. I would like to make the appeal for health in the future of the community, of the state, and of our children. Currently, in my medical practice, I am taking care of a large population of people, including elderly people. I am developing an integrative medicine program that is on the forefront of becoming the way and the method we are going in the future for treating people because we are asking for a participation of the patients in the provider experience for assisting in their health. I am also a Pro Farmer. My wife and I produce organic produce for the Las Vegas markets, and I have been composting for more than 20 years.

Combining this integrative medicine, which is involving people in their own health, their own future, and their own place in this earth that we have—the only one—we can integrate the opportunities for people to take their expression of growing and participation in growing of healthy foods. Healthy foods are a part of healthiness, for our overall health and for continuing to remain healthy. We have a lot of issues to deal with in farming, and part of that is gaining good quality organic materials. We do not add any fertilizers that are not

organic. We produce worm bins and worm castings. We also have compost piles. We do not have problems with any type of perceived contaminants. I am well aware of microbiology and pathogens; that is not an issue. The anaerobic fermentation adds a great value to how we can grow better foods to supply the market.

I think that Dr. Green gave a wonderful explanation, as well as everybody else presenting today, about the value of this. I do not know how this all comes through in the end; I know that we have to start someplace. My recommendation is to start this process for ourselves, for our health, for our children's health, and for the health of the planet. The way to do this is to allow for this to happen, to follow things along, and to continue to make things better. There is nothing that precludes this from being safe and sanitary and from working, besides obstructions from people who have other ideas about how to envision the future of our health and our community. I will end by saying that we take the responsibility for our own health and for the earth. This is a wonderful place to make that by starting this process and following it along. Thank you for your attention.

**Chair Flores:**

Could we have the next caller in support? [There was no one.] At this time, we will go to those wishing to testify in opposition to Senate Bill 349 (1st Reprint). We will start first with those here in Carson City. Then we will move back to the phone lines.

**Mackensie Warren, representing C & S Waste Solutions:**

Forgive me, members; I did have to step out to take another meeting. I will go back and listen to the record. But a few things that I was able to catch: I was a little bit curious about the business owner in Las Vegas talking about potential barriers. We have put several hours of work into this bill, meeting with Senator Ohrenschall and Senator Doñate. We have also engaged with Southern Nevada Health District and the Division of Environmental Protection (NDEP) of the State Department of Conservation and Natural Resources. What we have learned is that there really are not barriers. We have asked the questions: What is it that we can fix? What is it that needs retooling? We are unable to drill down on the solution.

Really, our opposition centers around what was raised in the hearing in the Senate. The appropriate place to address this is in regulation. I will dig into the meat a bit. By way of background, C & S Waste Solution is an independently owned family operation. We are the hauler and recycler out in Nye County—those are the towns of Pahrump, Beatty, Amargosa Valley, and Inyo County, California. From our perspective, a good example of why the local regulations are the appropriate place to tackle this is the fact that C & S brought recycling to the towns of Pahrump, Beatty, and Amargosa before we were statutorily mandated under that population cap. We will reach that number after the census, but ten years ago, before we were even required under NRS to recycle, we have done that. It started with one bin at Walmart that was emptied a couple of times a week. Now there are bins all over Pahrump. There is one in Beatty and Amargosa. On busy weekends, they are emptied multiple times a day. This is a great example of how local communities can come up with solutions that work for them.

But one of the real concerns for C & S, given that we are in Nye County, is that we do not have a health district. We do not have Southern Nevada Health District; they do not service Nye County. Who is our enforcement? Who is our regulator? Who is there to help us if something goes wrong? I think you probably heard from the presenters that if not done right, composting can be quite dangerous. We agree. We have had hours of conversations with NDEP, who share our concerns that this is unnecessary.

Changing the definition of composting, as S.B. 349 (R1) does, highlights just one method of composting. Are we, then, in some way discouraging community composting, if that particular community does not want to use that specific type of composting that is being carved out? The current definition of composting lives in NAC 444.572. This *Nevada Administrative Code* definition allows for any and all types of composting, not just one. The concern is that by adding this different definition of composting in statute, this could create an unfair, and we would argue a needless, advantage to that one type of composting.

Again, I have to recognize Senator Ohrenschall, Senator Doñate, and Mr. DeLee, with whom we have spent hours having this discussion. But if composting is not done right, it can be dangerous—coupled with the fact that we do not have a health district, and if something could go wrong, we put our communities at risk. Finally, we believe defining composting in state law, in NRS, undercuts the State Environmental Commission's ability to change the composting definition in regulation. That then has the effect that the Commission's responsibility, which is to oversee these composting operations and make sure that they are safe, responsible, and not creating pollution or nuisances within the community. I would want to point out that we see no issue with the farmers' market provisions in this bill. We would support those, but we would oppose the remainder of the sections in S.B. 349 (1st Reprint) for the reasons stated, that will also be touched on by NDEP.

**Chair Flores:**

I believe we have a question from Madam Vice Chair.

**Assemblywoman Torres:**

One of the oppositions that I have heard to this piece of legislation has been that the use of composting is going to impact the process for trash right now. It is not something you really touched on, but I am hoping you could answer this: How many people does your company serve right now? Do we really expect that many individuals to go from not composting to composting for it to impact the business model?

**Mackensie Warren:**

If I understand your question correctly, there is nothing that is preventing the community from composting. For example, Viva La Compost, whom you heard from in the support testimony, is operating currently. This is a service that they offer; for \$35 a month, they can take the goods and turn that around. We, as a company, C & S, do provide some compostable materials to a dairy farm in Amargosa Valley that is the only permitted

composting facility that is in our region. We currently participate in that. As to your question about how many customers we have, I do not have that off the top of my head. I am happy to get that information to you following this hearing, and if I missed anything else—please, I tried to unpack it.

**Assemblywoman Torres:**

If this is permissive language—that is exactly how I read the bill right now; it is permissive language—I am not understanding what the opposition is. It is not creating those now. It seems to me that this would help us create that dialogue with the counties so that we can have this conversation about compost. I remember conversations about composting when I was in elementary school. We had a little composter there at the school. To me, it seems that this has been a conversation that we have been trying to push for the last 20, 25 years. I am trying to understand what that opposition would be to our opening the dialogue at the county level.

**Mackensie Warren:**

The issue is that even though the language is permissive, S.B. 349 (R1) contains a definition of composting that singles out one type of composting, which directly conflicts with NAC 444.572, which includes all types of composting. The concern is that should, let us say, Nye County decide to engage in community composting, should this bill pass, you are now creating tension between the state's definition and the regulatory definition. We do not need enabling language to encourage counties to do this because it is already in their purview, and that process already exists for them. The concern is really with the definition in state law when it should be addressed at a local level.

**Assemblywoman Torres:**

Now my understanding is that the issue is with the definition of "compost." If we fix the definition of "compost" or put enabling language to allow for the Commission that is creating the regulations for composting now to create that definition, we would be fine with this bill?

**Mackensie Warren:**

Without seeing what that enabling language would look like and which definition of composting we would be adopting, I could not say at this moment, here on the dais, whether we could support that. But I will tell you that we have spent hours with the experts, which is the Division of Environmental Protection, who is the regulatory agency charged with keeping Nye County safe. Those state experts say that this is not necessary and creates a tension. Again, without looking at the language and knowing what the amendment could be, I am just not at liberty to say one way or another. But we will certainly continue to stay at the table in good faith and continue the discussion.

**Assemblywoman Torres:**

I certainly hope, then, that if that agency were to create a definition of "compost," we could get you in support of the legislation. Is that correct? That seems to be what I am hearing: If the agency that oversees the health and safety of the counties is okay with it, you would be okay with it.

**Mackensie Warren:**

I would not feel comfortable speaking for NDEP, but I will tell you that I have spent hours with them. That is their concern—the tension. They will be joining over the phone in neutral, I believe, so maybe we could ask them.

**Chair Flores:**

I know we have a follow-up from Assemblyman Matthews.

**Assemblyman Matthews:**

To make sure I understood a point that you made clearly: I believe you said that one of the results of this narrow definition of composting, and the way that this would be applied narrowly and specifically, could actually discourage composting at the local level, if that particular method or approved process is not something that is deemed to be workable at the local level. If that is the case, it would seem to actually undercut what seems to be the intent of this bill. Based on your understanding of the situation locally—which I think is probably greater than that of many of these Committee members—is that your assessment?

**Mackensie Warren:**

It is. For enabling language that is confined to a definition that is narrow, the argument could be made that if that particular community does not use that method of composting, could that dissuade them from going that route? Because they may say, Well, that does not work for our soil, or that does not work for this region. The concern is with this narrow definition.

**Assemblywoman Anderson:**

Thank you for bringing up the concerns. I know that sometimes that is not always comfortable to do. I have two questions. The first is this: Have you proposed an amendment to the sponsor to try to fix this problem? Because I know that on the Senate side, there were some other issues as well. I believe the trash haulers were where some of those problems were coming from. Have you, in fact, proposed an amendment to the makers so this can be fixed? That will be my first question. My second question will be for the legal counsel, if the Chair is open to it.

**Mackensie Warren:**

You are correct. The issues on the Senate side dealt with the franchise agreement that initially touched the definition of "solid waste," which would impact franchise agreements for haulers all over the state. That problem was fixed through consensus. However, the remaining portions are what we have been working through, having multiple calls with the Senators, Mr. DeLee, NDEP, and Southern Nevada Health District. Our suggestion would be to keep the farmers' market provisions of the bill and engage in the interim, which was offered by NDEP and Southern Nevada Health District. Because earlier, I stated that they are just unaware of anyone applying for a composting permit and getting denied. Is this really a matter of inaccessibility? What are we trying to fix? I think as an industry, we defer

to our state experts. Our suggestion was to retain the farmers' market and continue the work in the interim with some other solution because it is not a one-size-fits-all. It is really something that is dealt with at the local level and by regulation. It is very hard to legislate at a state level for a problem that looks different depending on where you are in the state.

**Assemblywoman Anderson:**

In your earlier answer, you stated that there was a disconnect between what is being proposed here and the *Nevada Administrative Code*. Could our own legal counsel also weigh in on that belief? I understand where you are coming from as the lobbyist bringing forward that information, but if we could also get that legal opinion, that would be very helpful.

**Erin Sturdivant, Committee Counsel:**

The definition set forth in section 7.1 is defining composting for the purpose of this specific section, so if a governing body establishes an urban composting zone, "composting" has the meaning set forth in subsection 4. The solid waste chapter of NAC and sanitation defines "composting" differently for the purposes of those regulations, but the definition set forth in section 7.1 would not apply to the NAC provisions. It does not overrule it.

**Assemblywoman Anderson:**

Thank you so much for that clarification.

**Assemblyman Ellison:**

I have one concern. If this grows the way it is, it would probably hit most restaurants asking for product—let us sell whatever. By doing so, would this not create a problem and a nuisance trying to collect all this waste at the restaurants, stores, and things such as that? Not only would it create a problem and a waste, but it would also create a smell in a separate dumping area. Would that not fall into this, or are we just looking at farmers' market and personal? Could you or somebody else answer that question?

**Mackensie Warren:**

We are not in the restaurant business; we are in the trash hauling and recycling business. I would not be able to answer that.

**Assemblyman Ellison:**

Would that not still create a problem with the sanitation department? Because it would be different bins, and I do not know—they still use the compost that they use at the landfill. They help use it as fill, do they not?

**Mackensie Warren:**

If I understand your question correctly, yes, there is a concern with compostable materials because if not stored properly, they can be dangerous. Our concern, for C & S, really exists with the fact that we do not have the same guardrails that more populous areas of the state have because we do not have a health district such as Southern Nevada Health District. The regulatory agency that is supposed to keep us safe is NDEP. The guardrails of understanding



how long the material can stay, to what amount, and the frequency that it is moved is definitely important to the conversation, but it would probably be something that is decided at a local level should various counties and cities decide to move forward with the composting plan.

**Chair Flores:**

Assemblyman Ellison, I am sure that when Senator Ohrenschall comes back up, he can talk about how that is managed and done in other states. I think that would be a good reference, to see what the case could potentially be here in Nevada. Thank you, Ms. Warren; I appreciate the dialogue today, and thank you for preemptively reaching out to a lot of us and working to express some of those concerns. We will continue with those wishing to speak in opposition to Senate Bill 349 (1st Reprint).

**Edith Duarte, representing Republic Services:**

We share many of the same concerns that Ms. Warren just mentioned. We have been working with NDEP, the sponsor, Senator Doñate, and the Southern Nevada Health District. Again, Southern Nevada Health District actually has not seen an application come through in a couple of years. It is my understanding that this does not stop any company from trying to compost commercially at this point. I also really want to thank Tara Pike for her comments regarding some recycling that we do with UNLV. We also do partner with a pig farm in Las Vegas currently, so we are already working on trying to eliminate food waste from casinos. We also do have a methane-gas-to-energy plant at our landfill. That does power over 10,000 homes in southern Nevada. We are trying to partner and be good partners with the community. We just do not really think that, currently, the definition is not necessary because it is broader. I know the legal counsel did clarify some of that portion.

Some of the other things that were brought up during the hearing: Ms. Pike mentioned curbside composting. I do want to let you know that would cause a rate increase because it would be hard to figure out who is composting and who is not. There would likely be a rate increase; at least Republic Services would have to look into that. To Assemblyman Ellison's point as well, we do worry about some of the things you have mentioned—contamination, smells, and of course, where these composting centers would be located.

**Chair Flores:**

I do not believe we have any questions for you. I think Ms. Warren took all those questions early on—the benefit of going first. I do not believe we have anybody else in opposition here in the room. At this time, we will go to the phone lines. [There was no one.] At this time, we will go to those wishing to testify in the neutral position on Senate Bill 349 (1st Reprint). We do not have anybody present, so we will go back to the phone lines.

**Greg Lovato, Administrator, Division of Environmental Protection, State Department of Conservation and Natural Resources:**

I am testifying neutral on S.B. 349 (R1). The Division of Environmental Protection appreciates the goals of the bill to increase reuse of food scraps and decrease the amount that ends up in landfills, which can contribute to statewide greenhouse gas emissions. These align well with the overall goals of the NDEP sustainable materials management program and the state climate strategy.

Under *Nevada Revised Statutes* Chapters 444 and 444A, NDEP administers the solid waste management and recycling programs statewide, along with our partner agencies, the Southern Nevada and Washoe County Health Districts, who serve as the solid waste management authorities for their jurisdiction. One of our primary objectives is to encourage and allow material reuse, such as composting, while making sure material is handled responsibly, through appropriate regulation and permitting.

In brief, it is NDEP's view that there are no regulatory or statutory barriers in place that currently prevent community composting from occurring, and that only referring to a specific type of composting in statute is not necessary and could have unintended consequences. The current definition of composting in NAC 444.572 allows for any type of composting, including the one proposed in statute by S.B. 349 (R1), and already sets a level playing field. Because the proposed legislation only refers to one specific type of composting and end use for composted material, and although it does not overrule the definition in NAC, reference to one type of composting may have the inadvertent effect of limiting how communities are able to compost and how to utilize the resulting compost. This can prevent communities from implementing composting programs where these narrow parameters may not be the best fit for their local environmental conditions or community needs.

Also, defining composting in statute limits the ability of the State Environmental Commission to modify the composting definition in regulation in the future to encourage composting or to make sure that composting operations are operated responsibly and do not create a pollution or nuisance concern as part of the process or in the accumulation of compostable materials.

Let me be clear: NDEP is willing to engage in conversation with our regulatory partners at the health districts and all stakeholders. We are willing to review best practices and lessons learned from our coregulators in other states, to revisit and revise regulations or, alternatively, to pursue technical assistance or other incentives needed to encourage and remove any barriers to composting in Nevada.

Our staff has discussed these concerns with the Southern Nevada Health District, and they share these. That concludes my testimony, and I would be happy to answer any questions. Thank you.

**Chair Flores:**

We do have a question for you.

**Assemblywoman Torres:**

Throughout today's hearing, we heard some disagreement about, perhaps, the opposition to the definition of "composting." I am wondering if you could send over a definition that the Division of Environmental Protection would feel would be more appropriate for that.

**Greg Lovato:**

I would just refer everyone to the existing definition of "composting" in the *Nevada Administrative Code* 444.572. I do not think we need to define it in statute.

**Chair Flores:**

Are there any additional questions? [There were none.] We will go to the next caller wishing to testify in the neutral position.

**Teresa Hayes, Environmental Health Program Manager, Division of Public and Behavioral Health, Department of Health and Human Services:**

I am happy to answer any questions you may have this morning in regard to this bill.

**Chair Flores:**

Members, are there any questions? [There were none.] Could we have the next caller wishing to testify in the neutral position to Senate Bill 349 (1st Reprint)? [There was no one.] At this time, we will come back to Senator Ohrenschall for any closing remarks.

**Senator Ohrenschall:**

Thank you for spending the morning talking trash with me. The point is, I do not think these are trash. A lot of good could come out of food waste for our communities and urban gardens, for our agriculturists, and for our farmers. Many parts of the state—I know my part of the state—have very challenging soil, as we heard Dr. O'Callaghan speak to. Trying to have a little neighborhood or community garden is very difficult. We have heard that this bill is enabling language. It does not force any county or city to do anything. However, if they would like to try to set up a composting program with community composting, they would be able to. We have heard that the definition here in the bill—which I pursued because I believed it had the fewest consequences to neighbors in terms of odor, bugs, rodents, and anything such as that—does not override the definition of "composting" in the *Nevada Administrative Code*. I do not believe it would change anything in terms of people wanting to compost with other methods that are not the bokashi method. I do appreciate your time, and I hope the Committee would think about this bill. Mr. DeLee might have a minute or two to jump in, with your permission, Chair Flores.

**Michael DeLee:**

I do not think I can add to anything today. It has been a great presentation; I appreciate the opportunity. A lot of people—oddly enough, on both sides of this bill—think it does not go far enough. I agree, but we have to start somewhere. Thank you.

**Chair Flores:**

I know you have been working thoroughly, for long hours, with the opposition. Hopefully, we can continue to work together and find a little bit more middle ground. I know you have moved very far away from where you started. I appreciate the hard work.

With that, we will go ahead and close out the hearing on Senate Bill 349 (1st Reprint). Next, we will invite those wishing to join us for public comment. We do not have anybody in person, so we will go to the phone lines. [There was no one.]

Members, for tomorrow, we will be meeting at 9 in the morning. We have a rather voluminous work session document. Please give yourself an opportunity to go through all of those bills. More importantly, please give me a heads-up on anything you will not be supporting. I do not want to bring anybody into this room only to see their bill die and embarrass them in that way. Out of respect, give me a heads-up. If there are bills you do not like, that is fine; you do not have to support anything. I do not want to bring anybody in here, make a Senator run out of a meeting, make their way up into the Committee room, and then we tell them that their bill is dead.

With that, members, thank you for all the work. I will not be adding anything to the work session document, but based on your feedback, I may be removing things from the work session document. There will not be any surprises about anything that is on there. That is the most we will see, but we may have to remove things if we do not have the votes. With that, this meeting is adjourned [at 10:50 a.m.].

RESPECTFULLY SUBMITTED:

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Lindsey Howell  
Committee Secretary

APPROVED BY:

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Assemblyman Edgar Flores, Chair

DATE: \_\_\_\_\_

## **EXHIBITS**

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is a copy of a PowerPoint presentation entitled "A Superior Alternative to Composting for Gardeners, Home Owners, and Farmers for Organic Waste Processing," presented by Lawrence Green, Private Citizen, Las Vegas, Nevada.