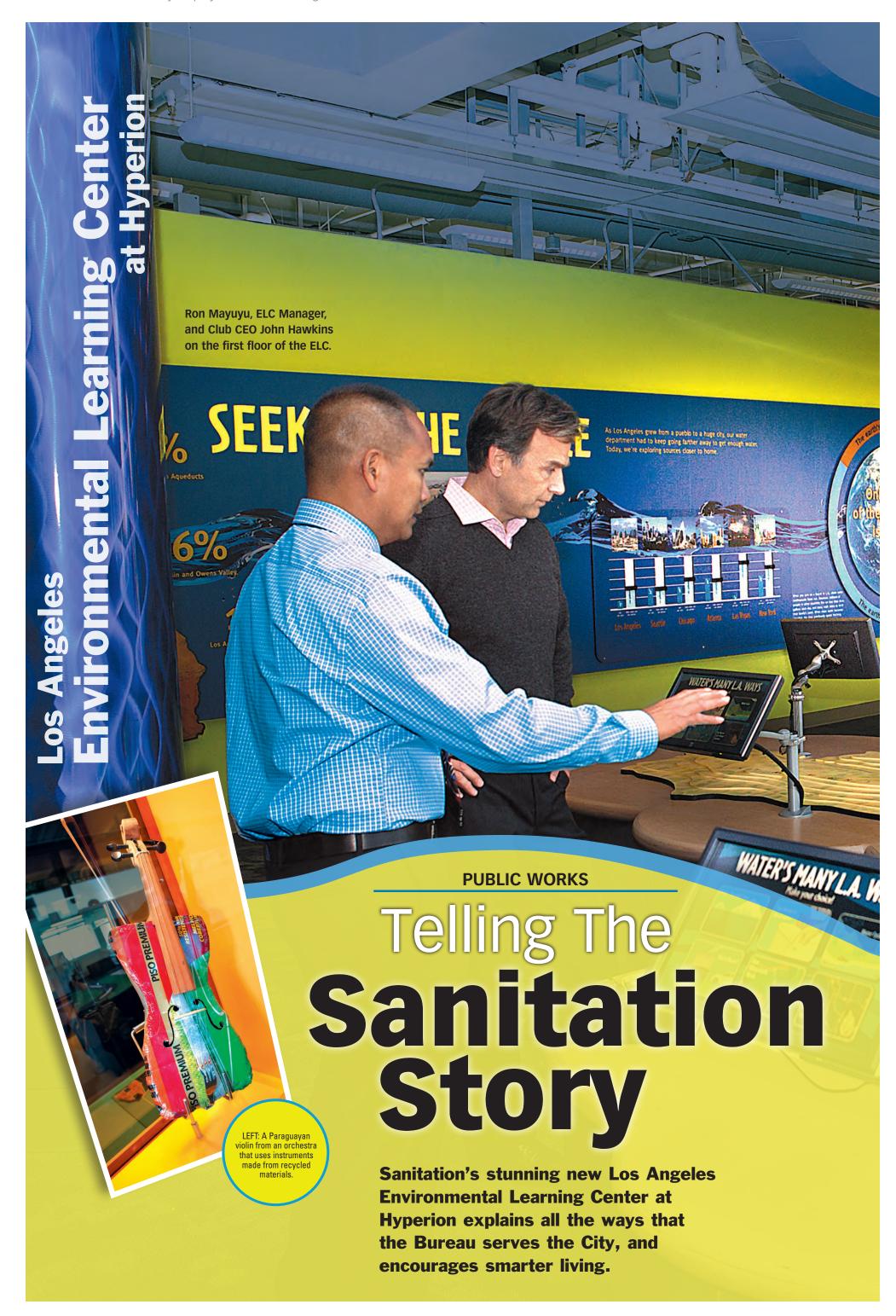




City Employees Club of Los Angeles 120 West 2nd Street Los Angeles, CA 90012









Alive! Feature

ALIVE! FEATURE: Telling the Sanitation Story

A Mini-Tour

The Los Angeles Environmental Learning Center at Hyperion (ELC) is packed with information and fun displays. Take a mini-tour with Ron Mayuyu, Environmental Engineering Associate IV and Manager of the ELC, and John Hawkins, Club CEO. And then make your reservations! (See reservation information at the bottom of page 23.)

Lessons Start Outside

Bioswales

Rainwater from the ELC's roof is collected here. Narrow depressions create miniature gardens that collect and filter runoff to remove pollutants.



wetland, to show how wetlands can collect stormwater runoff and naturally



Pavers

Ron Mayuyu (right) shows Alive! editor John Burnes how the permeable pavers in the ELC's outdoor walkways filter the stormwater before it enters the ground. The decking materials used here are recycled.



Rain Barrel

"We want to encourage people to collect their own rainwater," says Ron Mayuyu. This barrel is connected directly to the downspout from the ELC roof.



"SANITATION", **CONT. FROM PAGE 21**

center for environmental learning. Sustainable management:

- practices and learning experiences were built throughout the LEED (Leadership in Energy and Environmental Design) Gold facility. The following features have been incorporated to demonstrate and teach sustainable resource
- A first-floor gallery of interpretive exhibits that focus on clean water and watershed protection.
- A second-floor gallery that discusses solid resources and shows how Los Angeles is on the Road to Zero Waste.
- A green roof that is irrigated with recycled water; skylights that provide natural light to the second floor; photovoltaic panels that generate electricity; and a wind turbine, a solar water heater, and a view deck to observe the treatment processes at Hyperion and Santa Monica Bay.
- A terraced wetland fed with recycled water and stocked with mosquito fish.
- A walkway to the entrance made of permeable pavers, a stream and drought-tolerant landscaping.
- An 87-seat auditorium and learning lab class-
- Other sustainable features, including chilledbeam air conditioning, waterless urinals, low VOC (volatile organic compound) paint, and smart controls for irrigation.

The ELC is dedicated to inspiring future generations to protect public health and the environment through sustainable practices. The ELC is designed to increase visitors' awareness about the impact of human activity. Visitors are encouraged to identify opportunities to take individual responsibility as environmental





Recycled Water

Recycled water, which is not the same as "gray water," is used in this stream, in the demonstration wetland, for irrigation of the ELC's vegetation, and for flushing the ELC's toilets.

stewards, and make volunteer action in partnership with the City a part of their daily lives.

The cost to design and build the ELC was \$11.49 million, funded by the Bureau of Sanitation.

LEED Gold

The building housing the Los Angeles Environmental Learning Center was renovated to meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) and is certified as meeting its Gold level standards.

This certification was awarded because the City and its partners took special steps to meet important green building standards: reduce waste sent to landfills, conserve energy and water, create a healthier and safer environment for building occupants, reduce harmful greenhouse gas emissions, and reduce operational costs. ■

Visit the ELC

The ELC is designed for visitors fourth grade and up. It's designed primarily for school groups, but families and individuals can also make reservations. An expert guide will join your group to help you get the most out of your visit. It takes about two hours to tour the exhibit galleries.

COST: Admission is free.

HOURS: The ELC is open by appointment only, and on weekdays only, from 9 a.m. to 3 p.m. The ELC is closed on holidays.

RESERVATIONS REQUIRED:

Visitors to the ELC must make reservations. Because the Hyperion Treatment Plant is of prime importance to security, visitors who come to the ELC without a reservation will be turned away. But it's easy to make a reservation, so plan in advance.

The last visit of the day can be scheduled no later than 1 p.m.

RESERVATION LINES Phone: (310) 648-5363 Email: san.elc@lacity.org

Website: www.lacitysan.org/elc

Oscar Figueroa, Geographic Information Systems Supervisor, 8 years of City service, Club Member.

Double Duty

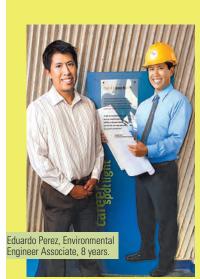
The LA Environmental Learning Center at Hyperion has devised a clever way to encourage sanitation careers amongst the thousands of students who have or will tour the ELC – by placing life-size displays of Sanitation professionals, with their credentials. These employees stopped by our tour to say hello and be photographed next to their immortal likenesses.













INSIDE THE ELC

FIRST FLOOR: Water's Many L.A. Ways

The Treatment Plant

This large gallery explains how a treatment facility like Hyperion receives the water, cleans and treats the water, and sends it back again to the ocean. This process has been featured in several Alive! feature stories.







ALIVE! FEATURE:

Treatment

Telling the Sanitation Story

Water's Many L.A. Ways

ALIVE! FEATURE: Telling the Sanitation Story



ELC Manager Ron Mayuyu (left) and Club CEO John Hawkins begin touring the ELC's second floor, dedicated to solid materials recycling.





The Green Roof

The exhibits don't stop inside the building. The roof contains several demonstrators, including skylights, solar panels, smart irrigation controllers, a solar water heater, and a wind turbine.



The Recycling Center

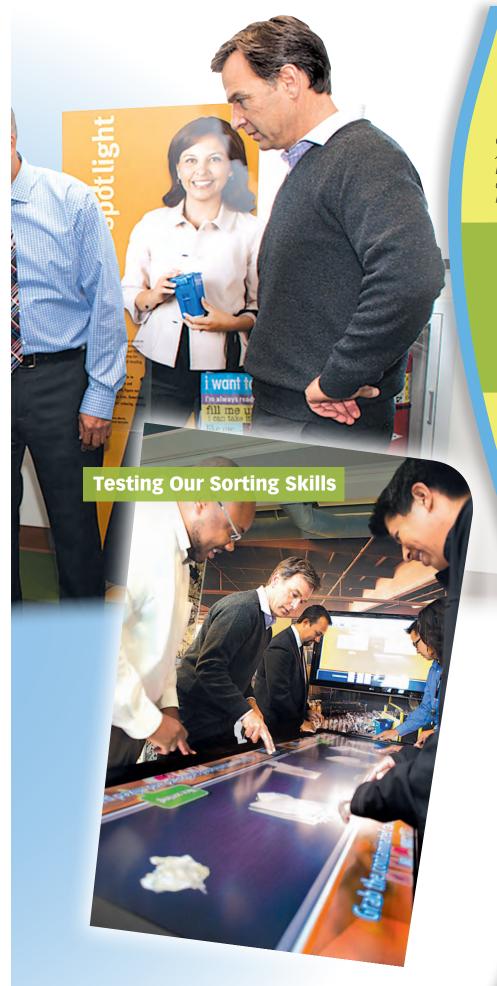
In this incredibly scale-modeled gallery, the ELC demonstrates how the City processes all the items it collects for recycling. The sanitation trash truck in the back looks incredibly real, yet is actually smaller than the real thing. Featured here are SAFE centers, transfer stations and landfills.

Home

An interior of a home has been modeled to give tips on how to save energy and reuse and recycle materials.



This two-sided display - "from used to useful" - demonstrates how many common household items can be recycled.



On Friday, Oct. 11, Club CEO John Hawkins and Alive! editor John Burnes interviewed Ron Mayuyu, Environmental Engineering Associate IV and manager of the LA Environmental Learning Center at Hyperion, in a conference room that's part of the ELC. - Ed.

The Alive! **Interview**

'The Center... for Environmental **Learning**

Alive!: Now Ron, your role with the ELC is what?

RON: I'm currently the manager for the ELC. I joined the project team during the construction, fabrication and installation phase of the building and exhibits, and I'm now doing the startup for the operation and maintenance of the facility. I'm going to be here for a while, but I'm not sure for how long.

Okay, so you're setting up the maintenance and sustainability of it.

RON: Correct, right. Then I may move on to a different project or stay here.

What year did you join this ELC project?

RON: In 2009, when they were about to start the construction of the building.

Okay. Can you briefly summarize your career here with the City? When did you join the City, and how did you come to be in charge of the ELC at this point?

RON: Well, I've had a very interesting career, I would say, with the City. I started in March

I actually started my career here at Hyperion. I joined the Bureau of Sanitation in 1991. I was an operator. I was assigned way back when we had the combustion and cogeneration facilities. I moved to what we called a cryogenic facility, still as an Operator, I was here for three years, and then the City stopped the job class of the Energy Recovery Operator, and that's when I moved to the L.A. Convention Center as a Building Operating Engineer. I worked there for five years, and then I came back to Bureau of Sanitation as an Environmental Engineering Associate for the Industrial Waste Management Division. And from that job class, I moved my way up and became a Supervising Engineer and an Associate IV. That's when I moved to manage as a Project Engineer for the construction, fabrication and installation of the ELC building and exhibits.

Spotlight on Sanitation

A quick overview: What is the ELC designed to do?

RON: The goal of the ELC is to educate the public about sustainable water and solid resources management, and in educating the public it would serve as a catalyst to change their behavior. Also, we want to share about the Bureau of Sanitation's infrastructure, programs and people and how they are improving the environment. And then lastly we want to have the ELC demonstrate the green



ELC Manager Ron Mayuyu.

building practices through the renovation and operation of the building. It's our mission and vision for the ELC to become the center for environmental learning here in L.A.

During the tour, you said that the ELC is kind of an encapsulation of everything that Sanitation does for the City of L.A.

RON: Right. As you mentioned, there's so much to see here at the ELC, and it's a representation of what the Bureau of Sanitation does for the citizens, for the residents of the City of L.A. As you know, the City of L.A. has almost four million people and about 470 square miles. And the Bureau of Sanitation manages the City's wastewater, stormwater and solid resources. So it's quite enormous, and we have almost 2,800 employees. The ELC tries to capture what everybody does in the Bureau of Sanitation in terms of protecting public health and environment. That's our main job – to protect public health and the environment. We kind of compress what everybody does in the Bureau of Sanitation, into this one little place, this Environmental Learning Center located here at Hyperion.

You talk about energy efficiency. The ELC is actually information efficiency. I don't know if I've ever seen so much information packed into three floors. How did you work on the process of getting everything that you guys do for the City of L.A. into this one location?

RON: It's a collaborative effort. We have such an excellent team of engineers, consultants and subject experts for each and every area of the exhibits and the building as a whole and these resources, and I'm very happy that they made themselves available for me to get that information from them.

It's an incredible job of condensing all the information down into these very packed exhibits. It's really packed. How did the **ELC** come about?

RON: It came about from recognizing the need to educate the public about the impact of their dayto-day activities on the environment. It started way back in 2006, and it was a collaboration between the Bureau of Sanitation, the Mayor's Office, the Bureau of Engineering and the Board of Public Works. They came together and said, "We think that the City of L.A. is ready for a facility like the Los Angeles Environmental Learning Center here at Hyperion."

Where did the funding come from?

RON: The funding for the exhibits came from our sewer and trash fees, not from the general fund. It's from the wastewater and solid resources fund.

It's all funded by the City.

RON: It's all funded by the Bureau of Sanitation.

— CONTINUED PAGE 28



'This is the only facility of its kind in L.A. or even in California.' - Ron Mayuyu

— CONTINUED FROM PAGE 27

Who was it designed for?

RON: It's open to the general public. Anybody can come here, but the exhibits are particularly designed for middle school and high school students.

Are you seeing a lot of that traffic? What are the numbers like?

RON: Since the grand opening, it's been busy. The grand opening was Sept. 16, 2013 and since then we've had about 1,000 people already who have gone through the exhibits or used the learning lab in the auditorium and also through the plant. Because we're located here at Hyperion they also have an opportunity to tour the plant.

Do they do those in tandem?

RON: They can do those in tandem, or they can just do the exhibits and/or the plant. As you mentioned there's a lot of information here, and we always encourage them to come back and learn some more.

This technology of recycling and sustainability, that's changing as fast as any other technology. Is the ELC adaptable for growth in technology?

RON: Yes, definitely. First of all, when we designed the exhibits and the building itself, we had this forward thinking of knowing what are the future challenges that we are facing, and we tried to incorporate those on the exhibits and the building as well. Of course maybe five or ten years from now we are going to face different challenges, but for the next five or even ten years, this is what we have. These are the challenges we're facing right now, and this is what we want to present to the public so that they know what we're doing and educate them so they can do something about helping us as well in achieving our goals.

You mentioned this is LEED Gold, that this was originally an administration building here at Hyperion. The facility itself is an example of recycling.

RON: Yes. The building was originally built in 1975, and it was the old administration building. It was vacant for the last 10 years until we remodeled and converted it to the ELC.

We mentioned the adaptive reuse of the building. Well, we've reused 95 percent of the building. During the construction phase we gutted everything down into bare concrete and brought the building up to code. When we designed the building, we pursued LEED Gold certification from the U.S. Green Building Council, and we did it.

You didn't have to make this a LEED-certified building. Where did that come from?

RON: It's part of our effort to teach the public, the visitors, about sustainability. And what better way than to present a LEED Gold certified building? That's the way to go in the industry for any new building construction.

Success Story

Were there any surprises once you opened and had people coming through? Was there anything that happened that you may not have expected?

RON: Well, a few weeks ago after the grand opening we had a family of six, a husband and wife and four kids, that came here to visit the facility. And they were surprised to see what they could recycle. They came up to the second floor, and they looked at the items that they could recycle at home. And they made a promise and a pledge to themselves that from that point on as a family they're going to start their own recycling program at home.

Well, that's exactly what you want.

RON: Right, they pledged to change their behavior; we educated them and had them go home and practice what they'd learned from here and then share the information to other people about what they could do at home.

Is there a basic misunderstanding in people of what happens here at Hyperion? Is it that people just don't know what happens here?

RON: Yes, but to me it's not a misunderstanding. It's



more of not knowing that we're here, not knowing what we do with the wastewater. We produce clean water out of the wastewater. And not only produce clean water, we actually reuse it. We reuse it for irrigation purposes and also for groundwater replenishment from water that we produce from West Basin [Municipal Water District, a separate public agency that provides water to a 185-square mile service area that includes portions of the Westside, from Malibu to the Palos Verdes Peninsulal and also for industrial use, and that's the trend. That's where we're heading as a bureau – to maximize recycled water use.

Do people know that the water goes back into the ocean since it's been treated to a high degree? Do people ever think about it?"

RON: They just never think about it. There was a time when, yes, let's discharge it to the ocean. It's clean. Let's discharge to the ocean, and we were fine. Now we're looking at it and saying, "It's clean water. Why discharge it to the ocean? We could find ways to reuse it," and that's why we said that now we're pursuing this effort to educate the public as well about uses of recycled water. It's a resource.

Speaking of recycled water... you not only talk about it in the ELC, but you actually use it, too.

RON: Here in the ELC, we use recycled water for flushing the toilets, and we also use recycled water for watering the plants outside of the building. But of course, we still use potable water for the faucet and for drinking.

Creativity on Display

This is a very creative site. This is a very creative center. Were you involved in any of the creative decisions about how to display certain

RON: Yes, I was. There's a creative side of it, and we had a designer who was able to express and translate the technical side of doing things to something more interactive and something that would connect to the visitors. But part of my job was to not lose the creative side of things and make sure that we would connect to the visitor, but at the same time things had to be consistent with what we do here and communicate our vision of sustainability here in L.A.

What's your favorite part of the ELC? What part do you think is really great even though you've been seeing this for a long time?

RON: I just like the whole facility. I look at it every day and say, wow, there is so much here to learn and see. I can really envision this facility as becoming the center for environmental

Do you see it moving that way? Do you see that it's strong enough to do that?

RON: It's strong enough to do that because this is the only facility of its kind in L.A. or even in California.

I've never seen anything like it.

RON: That's correct. It explains wastewater, stormwater or watershed protection, drinking water, recycled water, solid resources, sustainability, greenhouse gas emissions and things like that all under one roof. There's nothing like it, at

Do you know of any other facility or center like this in the country?

RON: There are facilities and centers elsewhere in the country, but it's always isolated in a way that one center might be focused just on water, or another center might only focus on recycling, or one center would focus only on stormwater. But this is the only center that actually combines all of those elements into one.

Are you receiving recognition?

RON: Well, yes. There's been local press, and I'm working with "Green Building" magazine right now. But we have received a few awards already.

Tell me about that.

RON: Aside from getting the U.S. Green Building Council LEED Gold certification in 2012, we also received the California Association of Sanitation Agencies, or CASA for short, in 2013 for Achievement Award for the Outstanding Capital Project. That is a statewide recognition. We also received Construction Management Association of America, or CMAA of Southern California Chapter 2012 Project Achievement Award for Building Projects, Renovation and Modernization. And then the last award we received so far is the American Society of Civil Engineers, or ASCE Region Nine in 2012, and we received the Outstanding Sustainable Engineering Project Award.

Have you ever personally with the City worked on

RON: No, first time.

You must be really proud of it.

RON: I am really proud of it. When I took this on, there was nothing like it, so there's no one in the City who had this type of background to work in the facility like this, and I did. I'm actually very thankful to our Bureau of Sanitation execs for giving me the opportunity to work on this project. And I have worn many different hats, from Operator to Maintenance to Engineer, and this is the job that actually gave me the opportunity to bring all those hats together and use them to make this project happen.

Does the ELC have a staff?

RON: Yes, we have a few. We have only a few for now because we're just starting out. We actually have three docents or educators, and then another educator or program or project coordinator. We have two admin people, and they supervise and help manage the whole facility operations and myself. So there are seven of us at this time. Out of the seven, three are part time.

Is it designed for self-guided tours?

RON: Actually, no. First of all, in terms of coming over here, we require them to give us a call or email us ahead of time. We require reservations. We still do not allow walk-ins at this time because of safety reasons.

Yeah, I see. It's an important facility.

RON: Correct. And when it comes to the tour, because our

ALIVE! FEATURE: Telling the Sanitation Story

THE REST OF THE

Los Angeles Environmental Learning Center at Hyperion

The Auditorium

The ELC contains a new auditorium (below) for presentations and lectures. Part of the auditorium is a chilled beam air conditioning system, which is just what it sounds like - the exposed beams at the top of the room are chilled, which cools off the room (right).





primary target audience is students, they usually come in tour groups or busloads of kids, and we provide them guided tours of the facility. We don't let them loose in the exhibit area, and we would like to make sure that they capture the information that we want them to capture and learn something from their visit here.

Credit Where Due

Who gets credit for this?

RON: Yes, I want to mention the project management team.

Sure.

RON: Public Works/Bureau of Sanitation envisioned and funded this project, and the Bureau of Engineering provided project management and construction management. The Bureau of Contract Administration also provided inspections for building construction and exhibit fabrication and installation. The Mayor's Office and Board of Public Works were also involved in bringing this project to fruition, as was C.D.M. Smith, our architectural, civil electrical and structural consultant. We had Amaze Design for the exhibit design, Ford EC for the building construction and Lexington for the exhibit fabrication. For construction management we had the Bureau of Engineering and a subcontractor, IEM MARRS. Special credit goes to the Bureau of Sanitation team, including the Public Affairs Office, Hyperion and the ELC staff, and team members from Solid Resources, Watershed and Wastewater programs

And I'd like to personally thank the Bureau of Sanitation management – Enrique C. Zaldivar, our Bureau of Sanitation director; Traci Minamide, our Chief Operating Officer; and Steve Fan, our Plant Manager, who just retired. He left Hyperion two weeks after the grand opening. He wanted to make this project happen and see it finished. I'd like to thank him for putting me in this position to work on this project. He was very supportive of this project as well.

And now we have our new plant manager who's actually overseeing this Environmental Learning Center, Tim Dafeta. He's going to carry over this vision in making this facility the leading center for environmental education here in L.A.

Ron, good luck with the ELC, and thanks for the interview.

RON: Thank you so much.

ELC Grand Opening

Mayor Eric Garcetti and City Councilmember Mike Bonin, 11th District, joined City officials from the Board of Public Works and Public Works/Sanitation to officially open the new LA Environmental Learning Center at Hyperion Treatment Plant Sept. 16. The program included a ribbon cutting and tours of the facility.

> Here are some photos of the event.



City Councilmember Mike Bonin, 11th District



Alive! thanks all those who helped us during our tour of the **LA Environmental Learning Center** at Hyperion.

Mayor Eric Garcetti

Front row, from left: Lisa Macauley, Wastewater Treatment Operator III, 8 years of City service; Chermaine Fontenette, Refuse Collection Truck Operator, 7 years, Club Member; Ron Mayuyu, Environmental Engineering Associate IV and Manager of the ELC, 22 years; and Oscar Figueroa, Geographic Information Systems Supervisor, 8 years, Club Member. Back: Rodrix Jennings III, Personnel Analyst II, 9 years, Club Member; Kenneth Jeong, Management Analyst II, 12 years; and Eduardo Perez, Environmental Engineer Associate, 8 years.