

Default Report

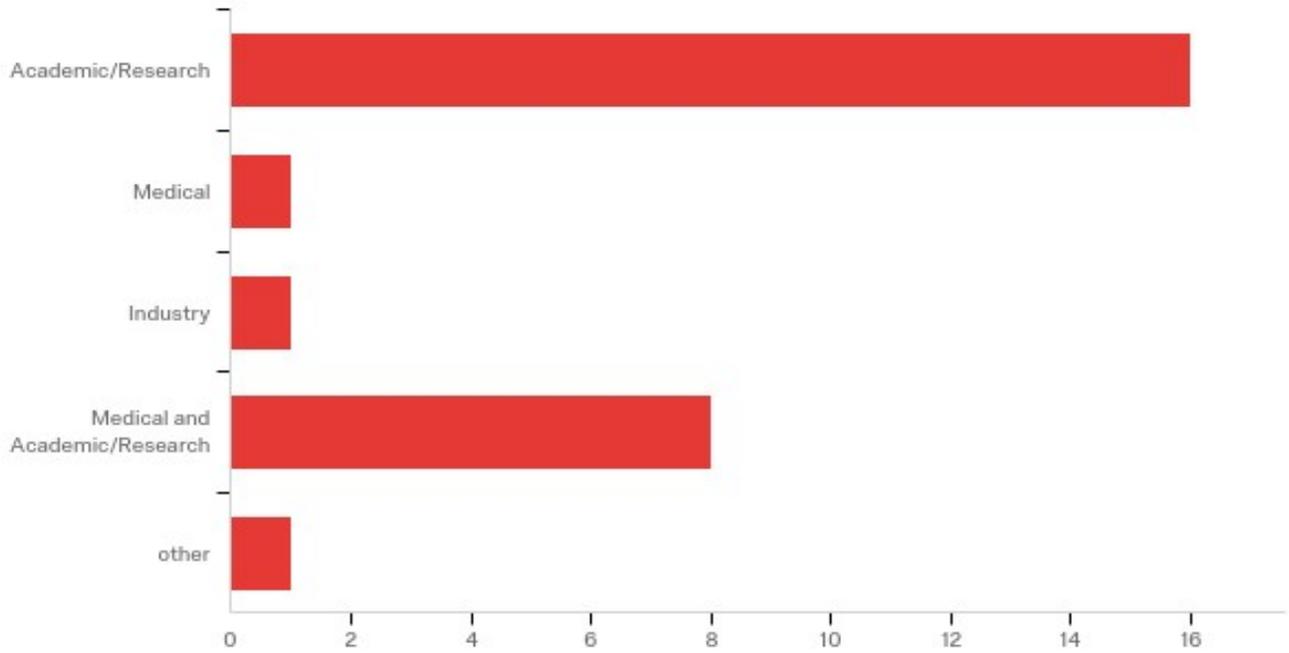
I2SL Lab Waste Diversion Survey

October 10th 2017, 3:29 pm EDT

Q1 - Lab location (city, state)

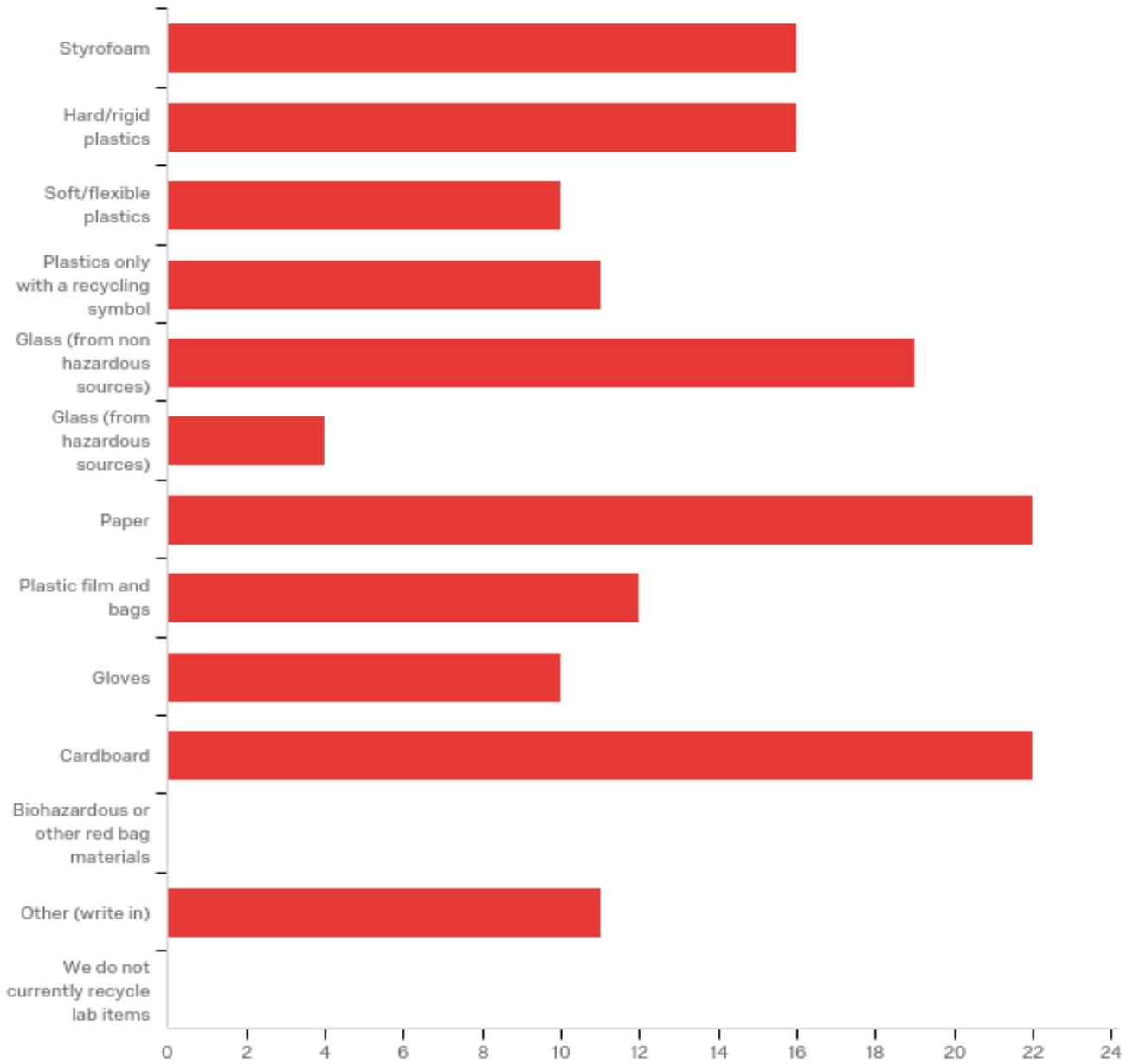
Lab location (city, state)
Chicago, IL
Vancouver, BC, CA
Chicago, IL
Santa Cruz, CA
Albuquerque, NM
athens, ga
Cambridge, MA
Bristol,UK
94501
Carlsbad, CA
Richland, WA
Washington DC
Cleveland, OH
Melbourne, Victoria
Ann Arbor, MI
San Francisco, CA
Cambridge, MA
Boulder, Colorado
Atlanta, Georgia
Davis, CA
Stanford, CA
Pasadena, CA
Davis, California
Durham NC

Q2 - Type of facility



#	Answer	%	Count
1	Academic/Research	59.26%	16
2	Medical	3.70%	1
3	Industry	3.70%	1
5	Medical and Academic/Research	29.63%	8
4	other	3.70%	1
	Total	100%	27

Q3 - Which lab items do you recycle? (check all that apply)



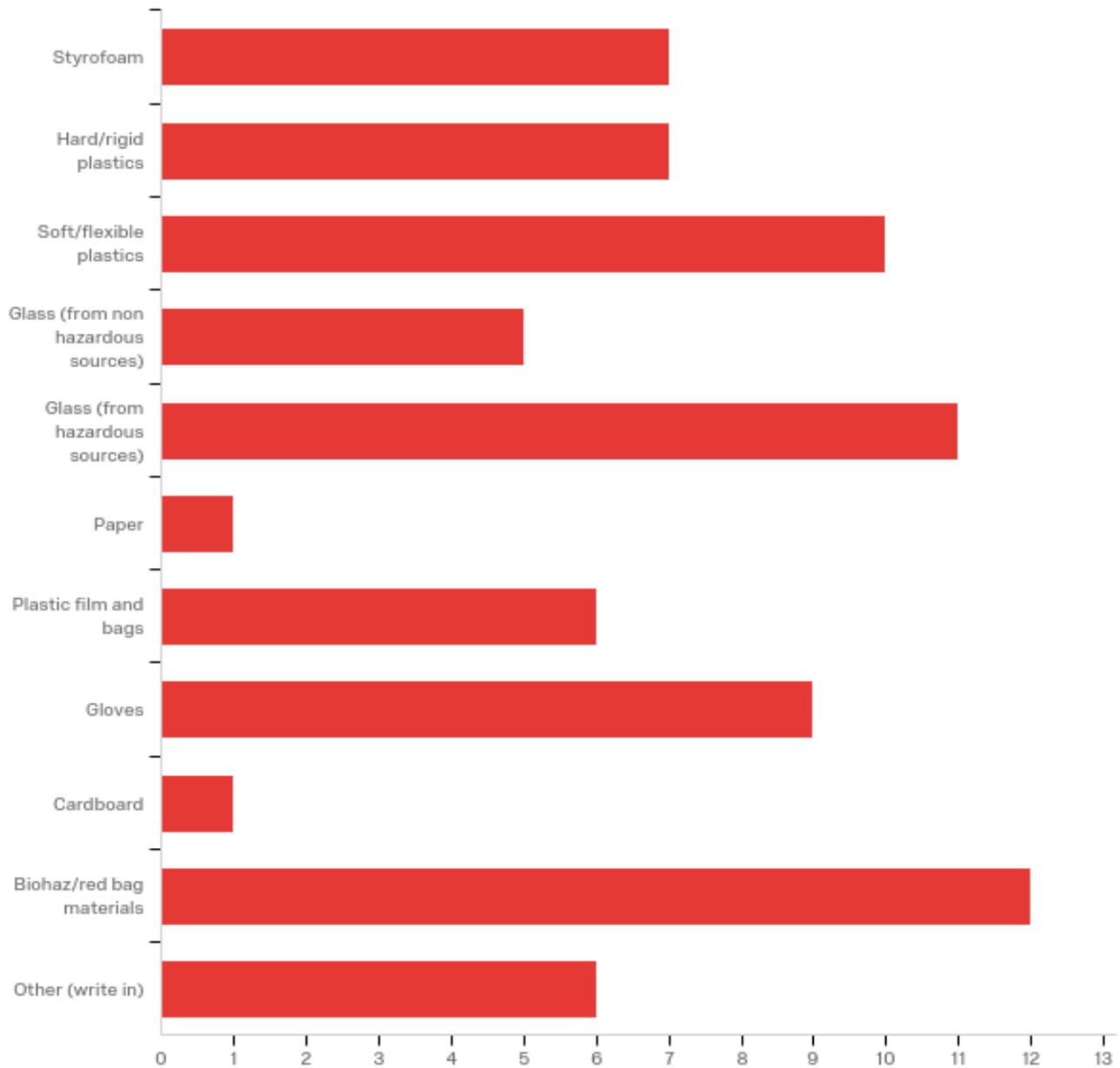
#	Answer	%	Count
1	Styrofoam	10.46%	16
2	Hard/rigid plastics	10.46%	16
3	Soft/flexible plastics	6.54%	10
4	Plastics only with a recycling symbol	7.19%	11
5	Glass (from non hazardous sources)	12.42%	19
6	Glass (from hazardous sources)	2.61%	4

7	Paper	14.38%	22
8	Plastic film and bags	7.84%	12
9	Gloves	6.54%	10
10	Cardboard	14.38%	22
11	Biohazardous or other red bag materials	0.00%	0
12	Other (write in)	7.19%	11
13	We do not currently recycle lab items	0.00%	0
	Total	100%	153

Other (write in)

Other (write in)
batteries
Pens, batteries, electronics
batteries; computers, monitors, metallic lead, 3D printer cartridges, non-contaminated tyvek garments, safety glasses, certain lab chemical waste
Millipore Filters
non-hazardous Pyrex
pipette tip boxes
Water purification cartridges
Metal solvent drums and secondary shipping containers; Carboys for Haz Waste Collection (re-use program offered by our EH&S); paper towels composting; animal bedding composting; solvent re-use and recycling
Recycling gloves in some pilot labs. We compost paper towels and biodegradable nonhazardous research materials.
packing peanuts, printer cartridges

Q4 - Which lab items would you like to recycle, but currently cannot? (check all that apply)



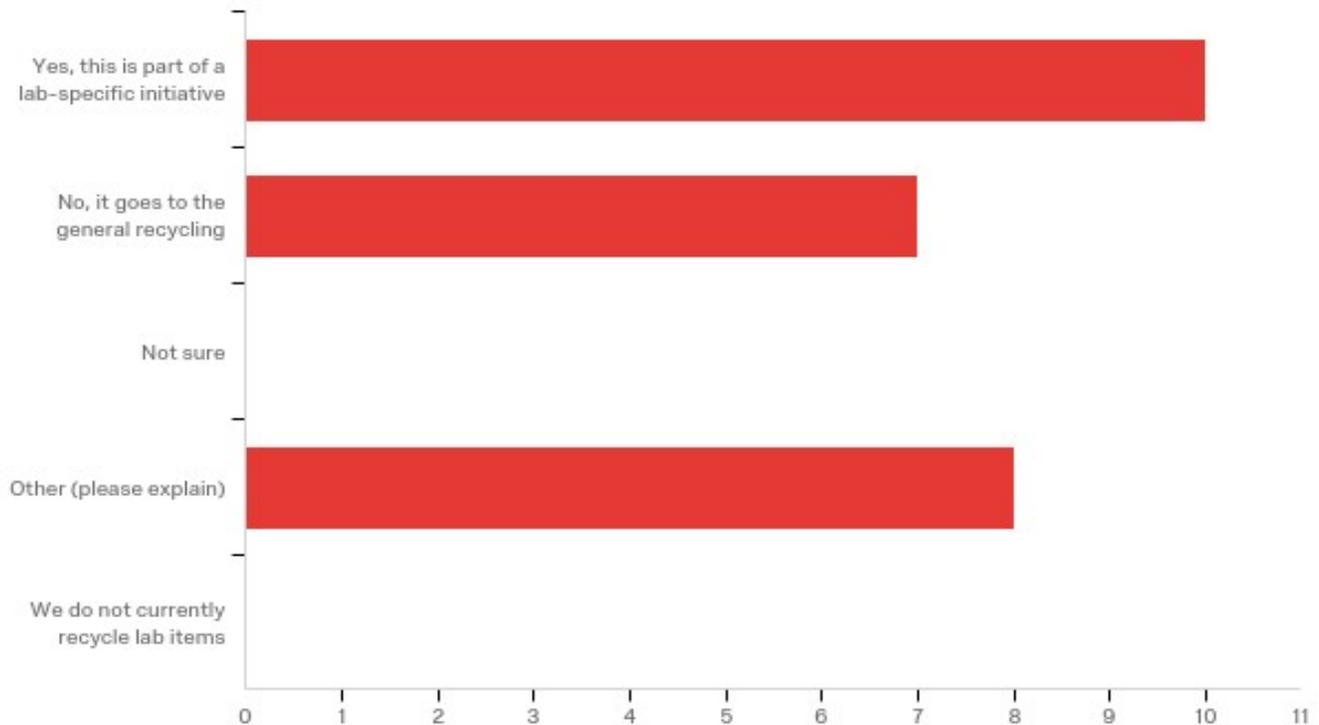
#	Answer	%	Count
1	Styrofoam	9.33%	7
2	Hard/rigid plastics	9.33%	7
3	Soft/flexible plastics	13.33%	10
4	Glass (from non hazardous sources)	6.67%	5
5	Glass (from hazardous sources)	14.67%	11

6	Paper	1.33%	1
7	Plastic film and bags	8.00%	6
8	Gloves	12.00%	9
9	Cardboard	1.33%	1
10	Biohaz/red bag materials	16.00%	12
11	Other (write in)	8.00%	6
	Total	100%	75

Other (write in)

Other (write in)
We have trouble recycling glass - we're just now getting a pilot going but have had a lot of resistance from recyclers. Plastic is also challenging - no tubes or other containers that look like they were used for research are accepted because of hazard concern
small plastics that are clean; clean room PPE
Ice packs, single use gowns
Gel packs! Disposable PPE.
Compost, ice packs
Solvents

Q5 - If you currently recycle lab items, do you do so via a lab-specific initiative?



#	Answer	%	Count
1	Yes, this is part of a lab-specific initiative	40.00%	10
2	No, it goes to the general recycling	28.00%	7
3	Not sure	0.00%	0
4	Other (please explain)	32.00%	8
5	We do not currently recycle lab items	0.00%	0
	Total	100%	25

Other (please explain)

Other (please explain)

We have a lab glass ware redistribution program.

Hybrid - styrofoam is lab-specific, all others are part of general recycling efforts

Paper, cardboard and rigid plastic are all part of general recycling, but all the other ones are special collection, processing and shipment efforts

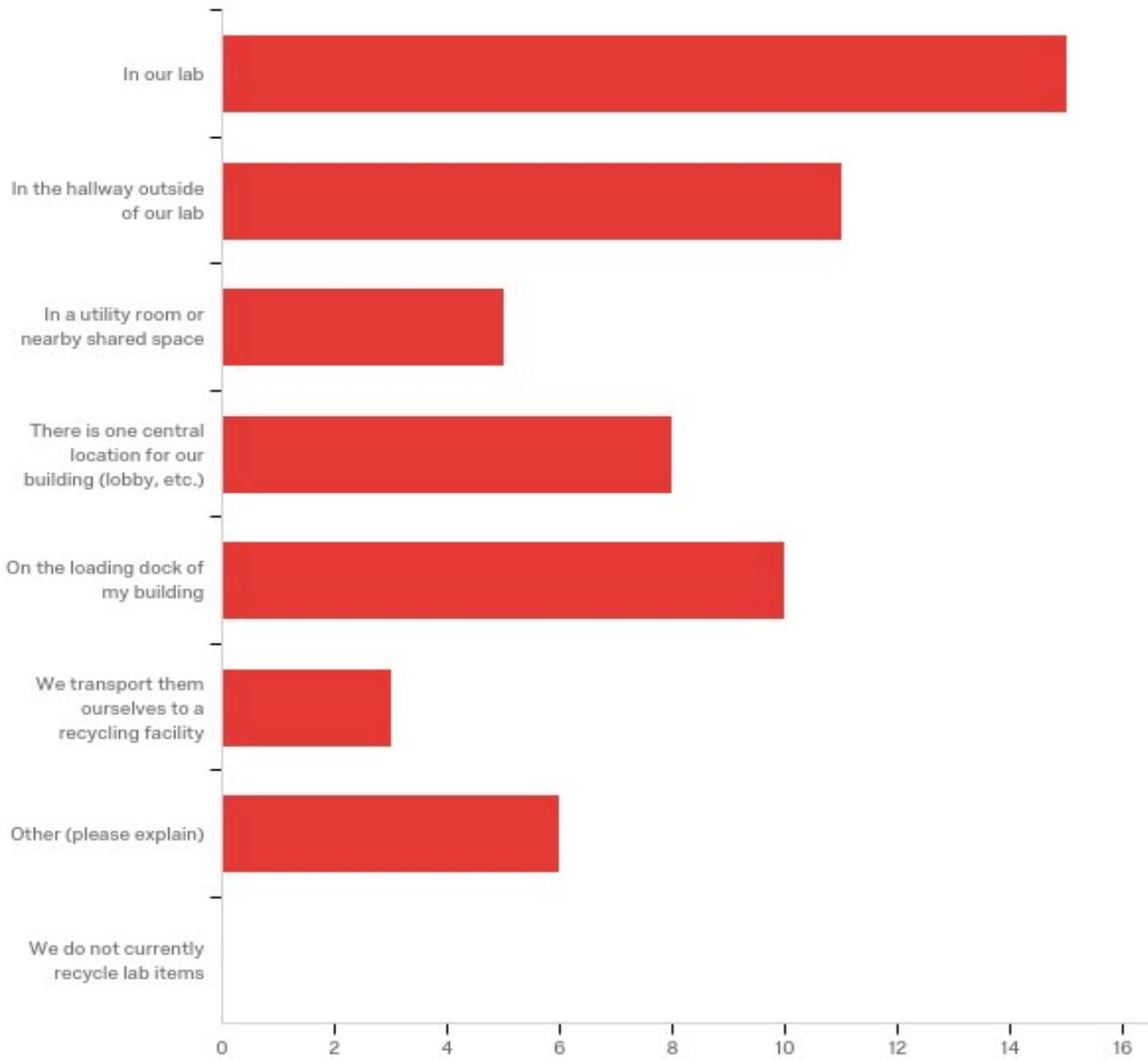
(styrofoam is general, plastic lab film is lab specific, so mixed between initiatives)

All labs can recycle rigid plastic and cardboard, but we have a lab initiative to expand it to additional items if they would like to participate

Tip boxes with Starlab

Our entire institutions recycles, but we have a lab-specific system in place that is slightly different than non-labs.

**Q6 - If you currently recycle lab items, where are the lab recycling receptacles located?
(check all that apply)**



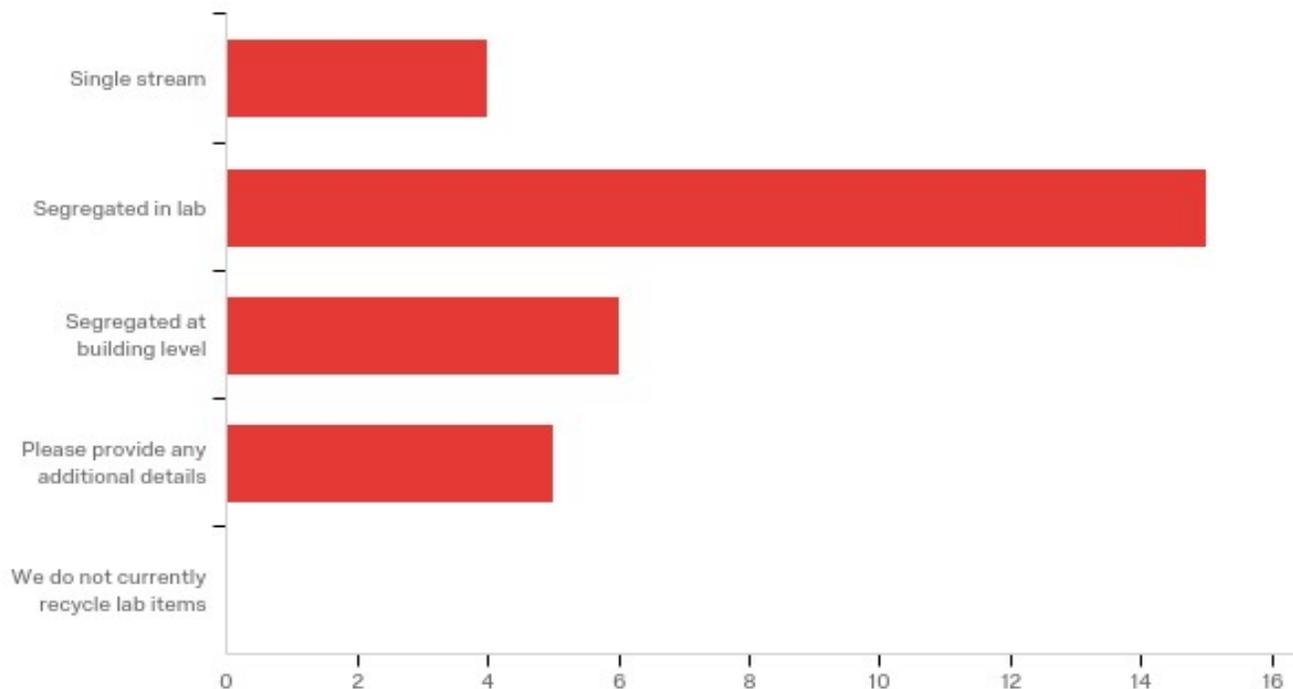
#	Answer	%	Count
1	In our lab	25.86%	15
2	In the hallway outside of our lab	18.97%	11
3	In a utility room or nearby shared space	8.62%	5
4	There is one central location for our building (lobby, etc.)	13.79%	8
5	On the loading dock of my building	17.24%	10
6	We transport them ourselves to a recycling facility	5.17%	3

7	Other (please explain)	10.34%	6
8	We do not currently recycle lab items	0.00%	0
	Total	100%	58

Other (please explain)

Other (please explain)
Some items are shipped such as nitrile gloves
depends on the item - hard plastics are collected in the lab, soft plastics & batteries in a central location, Styrofoam - loading docks of specific buildings, some collection drives are held & with item transport organized
Actually, it's a combination of choices 2-5
Styrofoam is centralized, but everything else is in the lab
Edge of dumpster enclosure
We place recyclables in equipment inside labs, then transfer the materials to waste stations in the hallway outside of our lab.

Q7 - How is your lab recycling segregated?



#	Answer	%	Count
1	Single stream	13.33%	4
2	Segregated in lab	50.00%	15
3	Segregated at building level	20.00%	6
4	Please provide any additional details	16.67%	5
5	We do not currently recycle lab items	0.00%	0
	Total	100%	30

Please provide any additional details

Please provide any additional details

All of our lab recycling streams are segregated at point of generation and then diverted to different receptacle or collection means

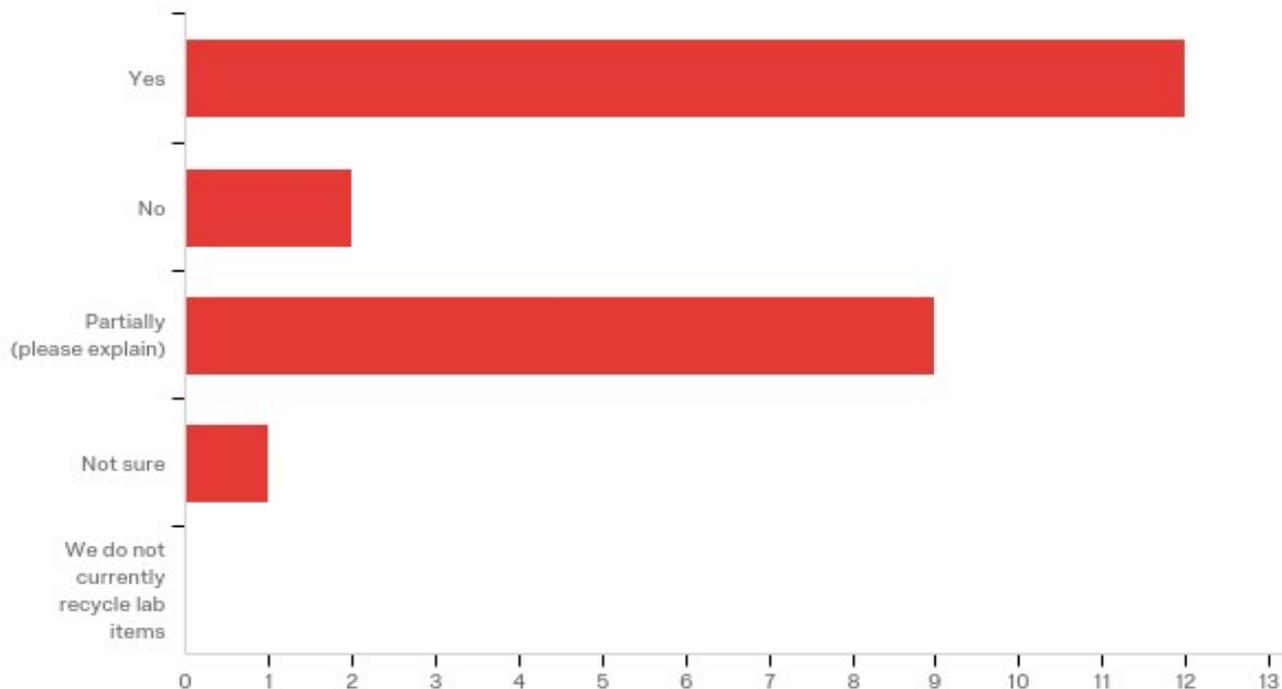
Solvent kegs, styrofoam, and millipore filters are not allowed in single stream

Cardboard is collected separately, paper is collected separately, glass and numbered plastics are comingled

Thin film, Styrofoam, clean gloves are separate; typical single stream collected in labs; space is limited in the lab & on loading docks; some streams cost \$ and are collected separately

Most streams are segregated in the lab. Some co-mingled streams are separated at a sorting facility onsite at our institution.

Q8 - Is your lab recycling processed by your regular waste/recycling vendor?



#	Answer	%	Count
1	Yes	50.00%	12
2	No	8.33%	2
3	Partially (please explain)	37.50%	9
4	Not sure	4.17%	1
5	We do not currently recycle lab items	0.00%	0
	Total	100%	24

Partially (please explain)

Partially (please explain)
Nitrile gloves are shipped to recycler
hazardous waste addressed by onsite environmental services facility
Paper, cardboard, pipette tip boxes, non-haz bottles (glass & plastic) go to our regular recycling vendor
We have an on-site crew of recycling techs (total of 6), 4 of which have shared responsibilities for some of the major recycling streams (to include lab and non-lab) and 2 others with shared responsibilities for the vast majority of the other recycling streams (lab and non-lab)

cardboard, paper, #1 plastics, clean glass by Single Stream recycling hauler; Styrofoam, gloves, thin film, batteries all by separate hauler

Some materials are processed by a Center for Hard to Recycle Materials (CHaRM) which is run by our regular recycler. Our brown glass recycling is picked up by a separate vendor.

Foam collected by EPS factory (Dart)

Everything except gloves

Not Styrofoam

Q9 - If your lab recycling is processed by a special vendor or hauler, how did you find out about them?

If your lab recycling is processed by a special vendor or hauler, how did y...
From the vendor
N/A
through our janitorial service
when we used a special vendor in the past, we learned about them from the Greening the OR program at the hospital
We have contract through Environment, Safety and Health (EHS).
conferences, web searches targeting different recycling opportunities, information brought to our attention from other researchers & institutions; etc.
Our laboratory brown glass is processed by a separate vendor. We found out about them through a person on our campus that has been working and advocating for the university on recycling/waste diversion for more than 30 years. He found out about this company at a local recycling meet-up and was able to help us set-up this recycling opportunity.
N/A
Lots of phone calls; Dart has a municipal foam collection for cities that have not banned foam. UC Davis receives foam coolers even though we don't use foam food containers so they serve our campus. Kimberly Clarke approached us because we are a major customer, and before we knew it, we were recycling 4 tons per year of gloves, now about 6-8 tons.
Google

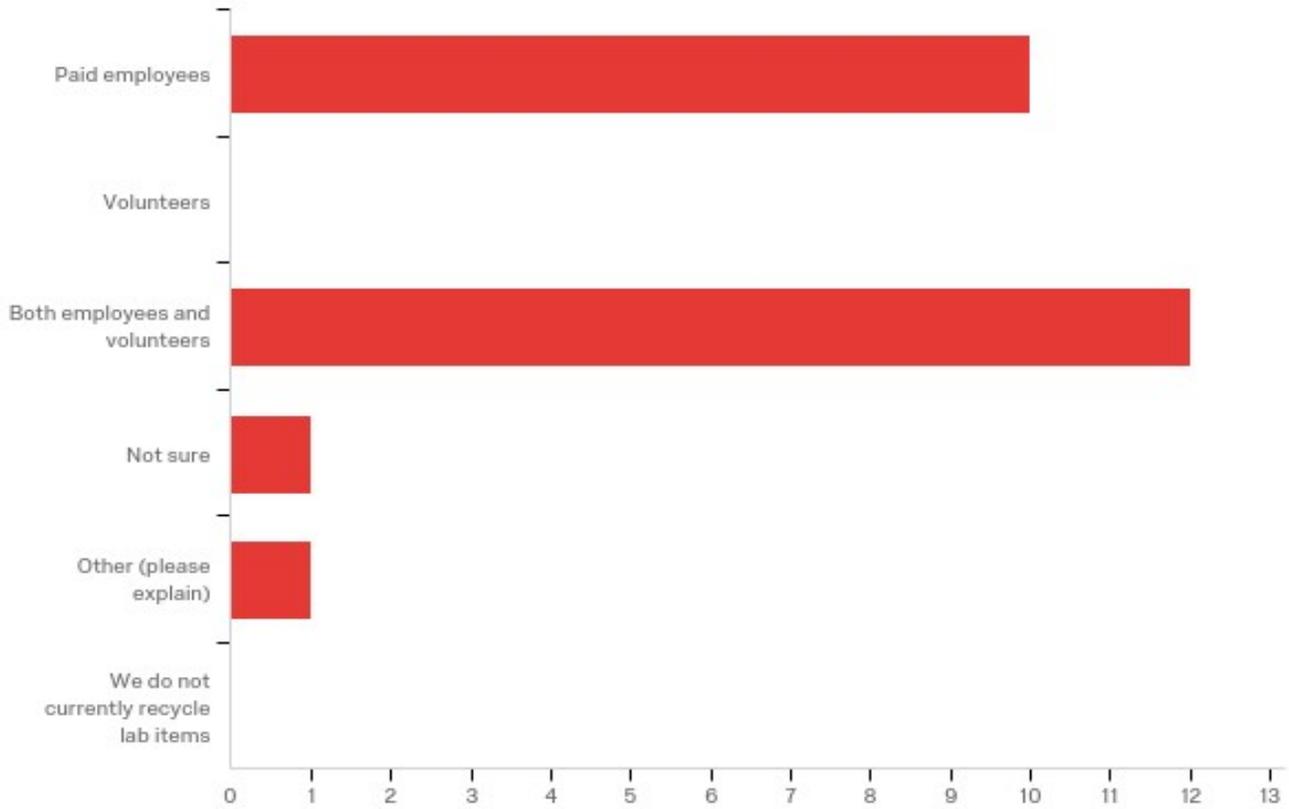
Q22 - If possible, please provide the names of your recycling vendor/partners

If possible, please provide the names of your recycling vendor/partners
Kimberly Clark, Loop Recycling
Loop Recycling Kimberly Clark (nitrile gloves) Terracycle (writing instruments) NewStar (electronics) Mecor (batteries) Battery Solutions (batteries)
Chris Leverenz <cleveren@ucsc.edu> Administrative Analyst Physical Plant, Grounds
I don't think it will be helpful, because we are the only site that they do this kind of work. For the rest of their sites, they are a hazardous waste handling vendor.
Athens Clarke County
Casella
Labwaste SUEZ
We were using Zarc but they recently canceled our service
Republic, Cardinal, Buckeye Industries (in the past)
Stericycle
Recology
Casella (single stream, maybe Thin Films??); TerraCycle (gloves and possibly PPE); Save that Stuff (Styrofoam - I think)
Eco-cycle, including their CHaRM facility Clear Intentions for lab brown glass recycling
Pratt Industries = co-mingled, white paper, cardboard, secure shredded documents, Strategic Materials = glass Newell Recycling = metal Premier Recycling = electronic waste Center for Hard to Recycle Materials = limited Styrofoam by delivery Textiles = re:Loom Compost = Southern Green Industries
Davis Waste Removal (foam) Dart Gloves) Kimberly Clark (foam) MilliporeSigma, New England Biologicals --cooler re-use (minor) (buying recycle items) LabCon--tube racks

PSSI

Shimar Recycling

Q10 - Is your lab recycling program facilitated by paid employees or volunteers?



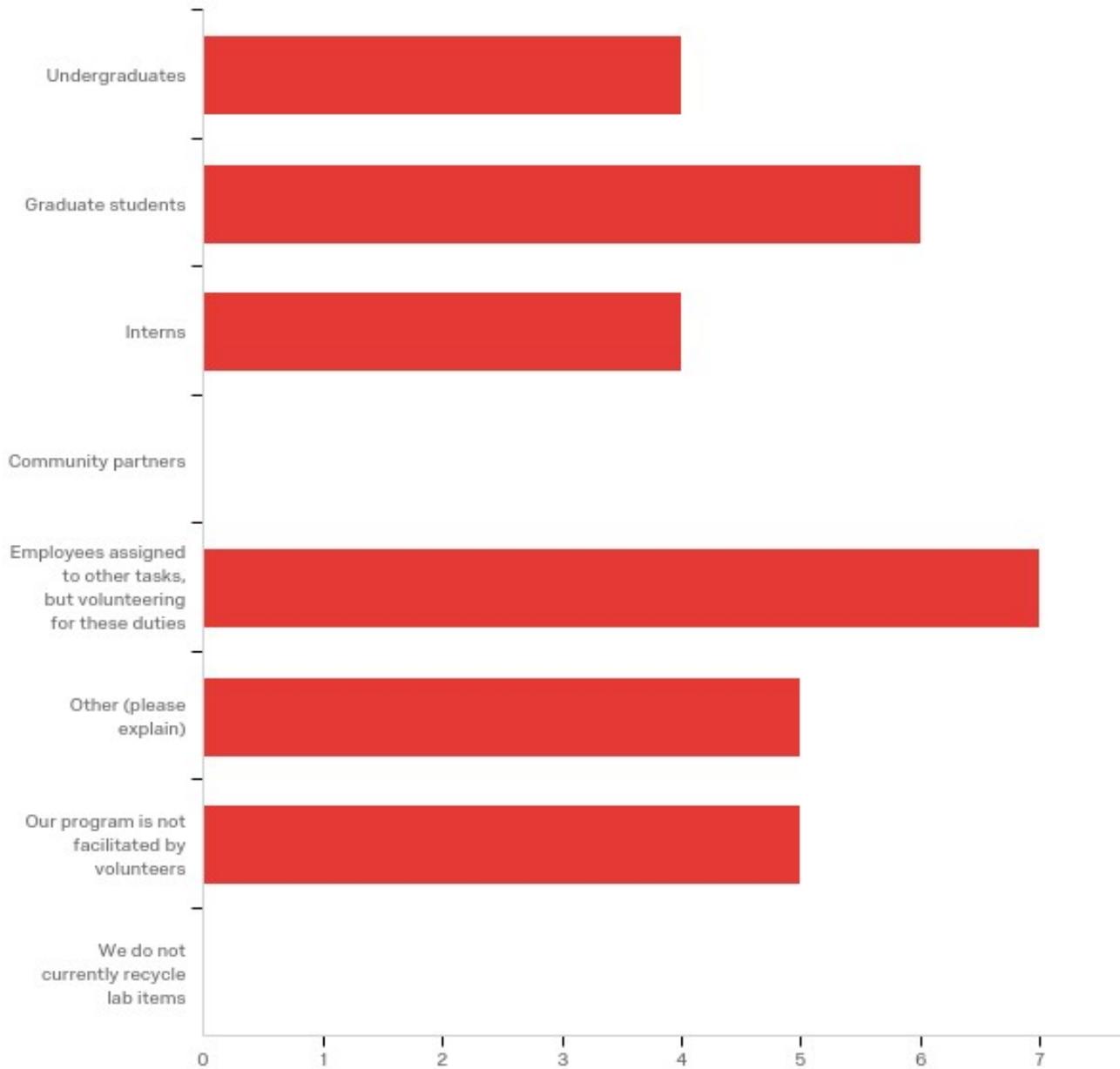
#	Answer	%	Count
1	Paid employees	41.67%	10
2	Volunteers	0.00%	0
3	Both employees and volunteers	50.00%	12
4	Not sure	4.17%	1
5	Other (please explain)	4.17%	1
6	We do not currently recycle lab items	0.00%	0
	Total	100%	24

Other (please explain)

Other (please explain)

Mostly by paid student assistants

Q11 - If your lab recycling program is facilitated in any way by volunteers, please indicate which groups are volunteering. Select all that apply.



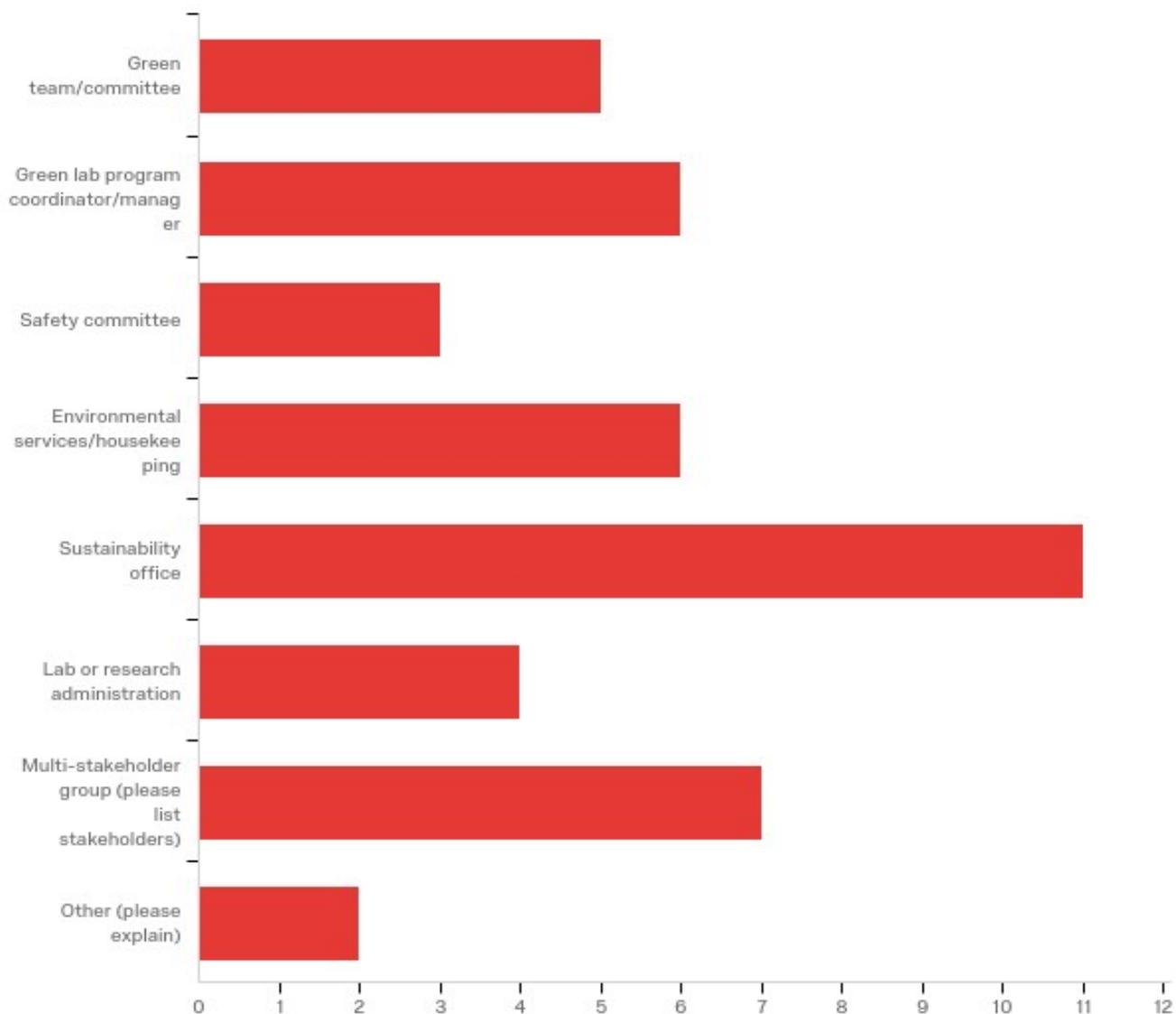
#	Answer	%	Count
1	Undergraduates	12.90%	4
2	Graduate students	19.35%	6
3	Interns	12.90%	4
4	Community partners	0.00%	0
5	Employees assigned to other tasks, but volunteering for these duties	22.58%	7

6	Other (please explain)	16.13%	5
7	Our program is not facilitated by volunteers	16.13%	5
8	We do not currently recycle lab items	0.00%	0
	Total	100%	31

Other (please explain)

Other (please explain)
Green Labs Program - interns paid through the Sustainability Office
Lab managers and postdocs
Laboratory staff
Lab personnel service equipment from inside the lab into centralized waste stations, where paid employees take it from there.
Drivers for our storehouse pick up foam coolers, sometimes ice packs.

Q27 - How are lab recycling program decisions made at your institution?



#	Answer	%	Count
1	Green team/committee	11.36%	5
5	Green lab program coordinator/manager	13.64%	6
2	Safety committee	6.82%	3
3	Environmental services/housekeeping	13.64%	6
4	Sustainability office	25.00%	11
8	Lab or research administration	9.09%	4
6	Multi-stakeholder group (please list stakeholders)	15.91%	7
7	Other (please explain)	4.55%	2

	Total	100%	44
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Multi-stakeholder group (please list stakeholders)

Multi-stakeholder group (please list stakeholders)
Sustainability office, lab managers, campus administration, state legislature
EH&S, Sustainability, Custodial, and Recycling Departments
all of the above
Facilities Recycling, EHS Sustainability/Green Labs, Sustainability; pressure from students
A partnership between our Environmental Center (which is like an office of sustainability) and our Facilities Management Recycling/Waste Management Group
Sustainability Office, EH&S, Recycling personnel, Custodial
All of the above

Other (please explain)

Other (please explain)
Grounds Services
Facilities Services

Q12 - Briefly describe the transportation logistics for your lab recycling program from your lab to the dock (or your institution's holding facility)

Briefly describe the transportation logistics for your lab recycling progra...

Paper: lab occupants place paper in 23 gallon containers in hallway. Building Service Workers (BSWs) take contents as needed to 95 gallon green toters on the dock.

Bottles and cans (including non haz lab bottles): occupants place these materials in 23 gallon containers in hallway. BSWs take contents as needed to 95 gallon blue toters on the dock.

Cardboard: occupants flatten boxes and place behind hallway stations (three 23 gallon containers - paper, bottles & cans, trash). BSWs take to tub, dumpster, or compactor at the dock.

Pipette tip boxes: occupants place in 35 gallon bags in wire frame containers. As needed, BSWs take to blue toters.

Batteries: occupants collect alkaline and other batteries in cardboard box. As needed, they walk the batteries to a battery collection station (8 or 13 gallon containers, or cabinets). These are collected by interns and Sustainability staff to take them to campus collection site. In UI Hospital, the occupants walk the batteries to one of two collection stations to be picked up by vendor.

Toner and ink cartridges: occupants are encouraged to ship them back to vendors. If vendor information is not available, or can't be identified, Gordon Flesch company that services the largest number of printers and copiers on campus will accept them. They can be boxes and shipped to them, or dropped off at multiple collection sites.

Writing instruments: occupants collect dead pens and markers in the lab, and drop them in 8 or 13 gallon containers, or cabinets, located in some buildings.

Electronics to be surplussed or recycled are processed through campus Property Accounting department website. A work order is then placed for campus movers to pick up equipment and take to campus warehouse for processing. Option: once a year, Sustainability office holds an event where lab staff can bring equipment for recycling to central location on campus, saving on hauling fees. Eventually, e-waste vendor NewStar sends semi truck to warehouse for pick-up.

Internal waste hauling infrastructure

Mixed paper and cardboard are deposited in typically 6-cubic yard dumpsters, which are picked up on a regular basis by front-loading compactor trucks, and then processed for baling.

the other recycle streams are deposited in a variety of different size receptacles and serviced based on an online request system. One vehicle is a panel van and the other vehicle is a 15-passenger van with all but the 2 front seats removed. In one example, the packing foams (#4 & #6) are collected once/week from dumpsters, adjacent to docks, by the techs driving the 15-passenger van, and then delivered to a "Recycling/Staging Tent", where they are fed into a foam grinding/densification machine and processed into uniform size logs, which are stacked onto pallets until a number of the pallets are stored until a shipment is coordinated with other rigid plastics.

building service workers remove items from lab and take to the dock or recycling receptacles

Done by custodial in all cases with exception of Styrofoam and Millipore filters. Styrofoam is handled by the Sustainability Office, and Millipore filters are handed by our hazardous waste hauler.

Technical team take the recycling to larger bins then waste companies come and do collections

dedicated janitor removes recycling from labs to loading dock

handled by EVS, who also are trained on recycling program details

Only for Styrofoam: lab staff taken it down when there a pile of it.

All other recycling from labs is taken by the cleaners when they empty the landfill bins each morning

Institution's holding facility

Customers place recycling in single stream bins, custodial staff empties into carts and transports material to the loading dock. Custodial empties carts into compactors for pick up by Hauler.

We are piloting the lab recycling program with Custodial Services via the MIT Green Labs Program. Lab have bins with clear signage in a designated location w/in the lab and have received training, Custodians are trained and have a schedule for trash/single stream daily and "other" streams throughout the week depending on volume. Clean gloves are done on a "volunteer" basis w/ approved labs only. New buildings have recycling alcoves at each floor built in to help accommodate larger containers for bulkier streams (styrofoam, plastics, cardboard, glass)

Some materials are only collected at the loading docks and the lab members need to bring it to the docks. Other materials are collected locally (hallways). Primarily, undergraduate student employees get it down to the loading docks, etc. on the pick-up days. However, some materials are also brought down by volunteer graduate students.

Paper towels for composting are collected in the labs and then lab members need to bring those containers to the bathrooms to empty in the composting bins there.

Our EH&S department is transporting solvents for re-use and recycling as well as animal bedding for composting and select carboys which they bring back to buildings for lab members to use again for hazardous waste collection.

Our Distribution Center picks up lab metal (primarily solvent drums) located near loading docks to add to the roll off or metal to be recycled from their facility.

Lab personnel empty equipment from inside the lab into centralized waste stations into the hallway outside of the lab. Custodial staff transport materials from centralized waste stations in hallway down to the loading dock of the building.

Standard lobby recycling is handled by custodians.

From the lab it's generally up to researchers (students) to bring to loading dock.

We have mainstreamed some lab plastics

Compost getting to the dock is a challenge, not covered by custodial for events.

Collection points located in hallways. Labs occupants collect recyclables in their lab in small bins or buckets and empty them when their full into the hallway collection bins.

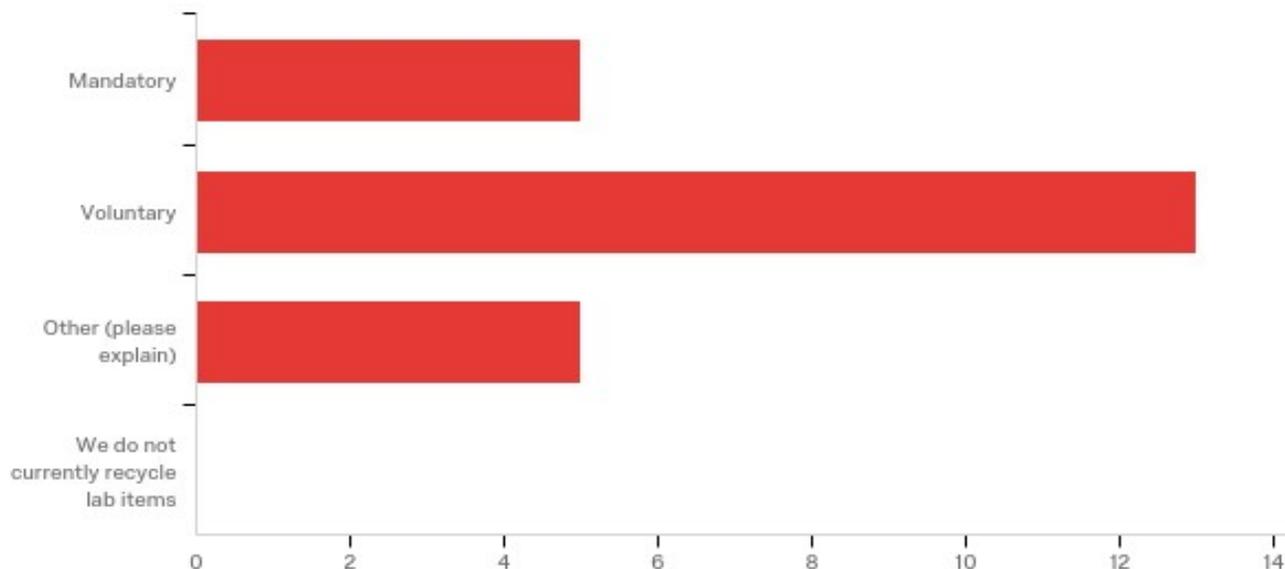
Recyclables are collected in the lab, taken to floor or building level stations by lab members, collected by custodial from central locations and taking to pick up points, collected from pick up points by recycling team and taken to facilities yard for processing, picked up from facilities yard by vendor

lab member carries recyclables to recycling stations which are collected by University team.

Q13 - Briefly describe the transportation logistics for your lab recycling from dock to recycling facility

Briefly describe the transportation logistics for your lab recycling from d...
<p>Paper, bottles and cans (including non-haz lab bottles, and pipette tip boxes), and cardboard recycling are picked up by UIC trucks (rear end packers). They are transported to Loop Recycling, located within 3 miles of campus.</p> <p>Batteries: vendor picks up when called.</p> <p>Toner and ink cartridges: vendor picks up from central campus collection sites periodically, or if called.</p> <p>Writing instruments: interns and Sustainability staff collect from locations in buildings. They are boxes and shipped via ups to vendor.</p> <p>E-waste vendor picks up monthly from campus ware house.</p>
Internally-owned recycling & waste hauling equipment
<p>in the case of cardboard and mixed paper and small-size rigid plastics, they are processed into 1000-1800 pound bales and periodically delivered to the local MRF or a recycling vendor, either by rolloff or by tractor-trailer. When sufficient quantities exist of Tyvek and stretch wrap accumulate, they are baled and have different transportation logistics. the remainder of the lab recycle streams are all transported and collected back to the aforementioned Recycling/Staging/Storage sprung tent structure, and accumulated to differing quantities/volumes before they then too go out on a variety of different means of delivery to recycling vendors.</p>
facilities workers transport from university to county recycling
Handled in cooperation by our waste hauler and internal recycling department. I am not involved in the logistics.
Unsure
Recycling vendor picks up at centralized location on campus and hauls to facility
Commercial vendor currently takes it with regular recycling. We are working on a backhauling plan with Cardinal. We previously had pick-up by Buckeye - a nonprofit community partner
University's waste and recycling contractors
MRF
Recology, our Hauler, picks up compactors or open bins on frequency required by building volumes.
MIT Recycling has a compactor that makes scheduled stops to single stream dumpsters and then brings the recycling to Casella at the local MRF. Alternative streams (Styrofoam, universal waste/batteries, etc.) are collected by MIT Recycling at various dock areas and brought to a staging location on central campus (not big enough, no security) and the vendor removes weekly or per request to their sorting facility.
It is picked up by trucks that visit the docks, etc. on our campus from each involved recycling company.
Dedicated recycling staff pick up recyclable materials from the loading dock and transport to the sorting facility on campus. Materials are picked up from vendors from sorting facility.
<p>Mainstream plastics , cardboard & paper hauled by UC Davis trucks to plastic recycling facility</p> <p>Gloves shipped in pallets to KC</p> <p>Foam collected in salvaged 2 CY woven Nylon bags, staged in tractor trailer on loan, and taken for grinding at their factory</p>
Picked up by waste hauler
See previous answer
unknown

Q14 - Is participation in your lab recycling program mandatory or voluntary?

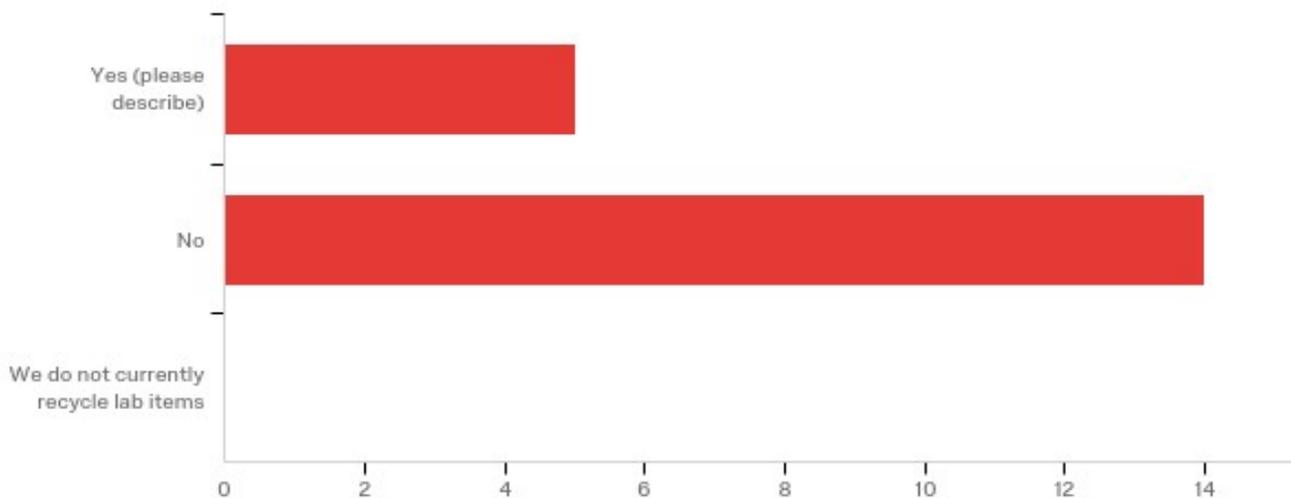


#	Answer	%	Count
1	Mandatory	21.74%	5
2	Voluntary	56.52%	13
3	Other (please explain)	21.74%	5
4	We do not currently recycle lab items	0.00%	0
	Total	100%	23

Other (please explain)

Other (please explain)
We are a federal government funded facility and as such the Federal Pollution Prevention Act of 1990 is applicable. However, we have gone well beyond the minimum requirements because of subsequent Executive Orders, Dept of Energy Orders, Federal Acquisition regulations. ISO 14001 certification and in more recent years, setting a corporate goal of Zero Waste by 2025.
Leadership supported volunteers installed lab recycling in their departments
Mandatory in clinical labs; voluntary in research labs
we have only piloted lab recycling in one building and have not rolled it out to other labs. Likely to be mandatory where possible
Beginning January 2018, recycling program is mandatory.

Q15 - If participation in your lab recycling program is voluntary, do you offer incentive programs or challenges?



#	Answer	%	Count
1	Yes (please describe)	26.32%	5
2	No	73.68%	14
3	We do not currently recycle lab items	0.00%	0
	Total	100%	19

Yes (please describe)

Yes (please describe)

Though I have stated our program is mandatory, the participation by the 12,500 member lab workforce is voluntary. We don't have incentive programs or challenges. We are a large campus of laboratories and office space, with the full suite of services to operate and maintain them. We have a well-developed infrastructure, paid for the most part by reinvested recycling revenues. We have had a good education and awareness program over the last 20+ years. Each year, it seems, we add 1-2 more waste streams to the recycling program, some of which are "grass roots" and then we refine and expand it as necessary or possible.

Sustainable Lab Recognition Program

Not in general, but one time we did run a recycling contest with prizes.

No challenges yet, but we offer funding to all labs who acquire certification from the Green Lab program.

Free recycling bins

Q16 - What type of metrics are reported for your lab recycling program? (e.g. annual report, monthly report-out, item at a regular meeting, etc.)

What type of metrics are reported for your lab recycling program? (e.g. ann...
We collect and report monthly weights for all items. Estimated building level weights of paper, bottles and cans, and cardboard are collected daily and reported monthly as well.
Styrofoam recycling diversion
Waste generation (in metric tons), waste recycled (in metric tons), recycle rate
Currently tracking the weight of items removed
It currently cannot be calculated accurately. We are waiting for installation of scales on the recycling trucks, at which point they will track each building.
Annual report
annual report
no lab specific details are collected or reported
% of waste diverted from landfill via audits conducted
Annual report
general recycling metrics from building diversion
annual report by the MIT Recycling Program; EHS Green Team annual report & educational seminars throughout the year
We report weights for each type of lab material recycled to those working on reports for all campus recycling (not just labs)
Monthly and annual building totals. Metrics per lab are not possible.
Gloves report from KC; Not split out from office recycling, so mostly unknown. 5 buildings audited 2013.
number of participating labs, waste diverted
No separate metrics from standard campus recycling

Q26 - In what format and with what frequency are these metrics reported?

In what format and with what frequency are these metrics reported?
They are reported in tons. Sustainability provides annual and more frequent reports to numerous departments, associations, and agencies.
yearly, spreadsheet
We collect data monthly and quarterly, compile it and then submit the data on an annual data call by the Department of Energy (the funding agency for our laboratory). We also provide a narrative of the program's past year accomplishments. We also provide data and narrative to another annual report, called the Annual Site Environment Report (ASER) for public dissemination.
none currently
annually--company report, end of year metrics
N/A
quarterly and annual reports
none
bar/pie graph by stream in annual report; visual presentation during Sustainability discussions
Weights, yearly or 2x/year
Monthly and annually.
NA
quarterly to management and various stakeholders
Annually, annual sustainability report

Q17 - What is the biggest challenge you have with your current lab recycling program?

What is the biggest challenge you have with your current lab recycling prog...
lack of awareness & limited types of materials accepted by recycling company
Declining state support for higher education funding.
Not enough support from EH&S, Lab Safety Managers and PIs to encourage diligent recycling.
Funding for labor to accomplish our vision for materials sustainability and the corporate goal of Zero waste by 2025.
fear of contamination or RCRA violations. We need close oversight as our institution has had some RCRA concerns over the past few years. We are still figuring out how to provide adequate oversight.
We cannot recycle lab glass at this time.
Vendor that accepts all lab plastics. Having to use multiple vendors for plastics, gloves, tyvek is very difficult. The fact that lab plastics are not all labeled makes it difficult to find a vendor.
Consistency, space, interest from commercial recycler, cost
Getting in implemented in the first place! Not being able to recycling brown glass (winchester bottles). Not being able to recycle containers that previously contained hazardous material such as acetone or chloroform despite know that each container is virtually free of such solvents and rinsing and leaving to evaporate in a fume cupboard.
Lack of information. Behavioral change.
Ability to recycle more ridged plastics
too many bins for the various types of streams and limited space in the labs for all the bins; logistical issues and consistency in the training w/ custodial services; lack of money for recycling more streams outside of single stream (PPE, gloves, styrofoam, etc.)
Lack of a program or place to take some of our types of our lab specific materials...such as ice packs. In other words, a lack of extended producer responsibility on the part of companies shipping these materials to our campus.
Training and rollout to all labs is challenging because of limited staff time. We have found no solution to foam cooler boxes and gel packs.
Boutique items, mixed plastic items (polystyren & ppe), compost is our biggest item; surplus is has some lost value. I would say we don't have a good audit on hard lab plastic mass per month. It would be interesting to estimate from procurement.
Re-use items; knowing if recycling fates are legit: gloves; foam, plastics
No mechanism for recycling Styrofoam
Widespread awareness/adoption; concern over cleanliness and toxicity
Containers for recycling got full and are not picked up as often as needed
Institutional support for expansion.

Q18 - Briefly describe your ideal lab recycling program

Briefly describe your ideal lab recycling program

I think our pipette tip box program comes close to ideal. It is popular, produces no vector (rodents, insects, odors) problems, and makes our hallways look like someone has been collecting giant Legos.

Styrofoam recycling collectors at each building, with quarterly pickups.

Pipette tip recycling at floor level, monthly pickups

Glove recycling at floor level, monthly pickups

Hazardous glass recycling at floor level, monthly pickups

Floor level single stream recycling for non-hazardous glass, hard plastics, aluminum, cardboard

Well, it actually starts with waste reduction, which is the first tenet of the waste management hierarchy and is a requirement by the permit we have with the State of New Mexico for the permit for our hazardous waste handling facility. But as is quite evident, labs generate much more than chemical waste. Still our ideal program would be based on the many means of reducing waste at the source and working with suppliers to take back some spent items and packaging. And even moreso, it would actually be part of a transformation to a circular economy. We have communicated often that we can't get to zero waste solely by recycling. But, we realize it's a tall order and depends heavily on behavior change and for a wider embracing of the recycling zealot's principle of valuing waste as a resource.

Would like to recycle all non-contaminated lab plastics and create a culture where researchers recycling lab waste is the norm.

Each lab would have a recycling coordinator that informs all students and staff of the safety protocols. Our waste haulers accept all materials for recycling that are considered safe for handling, and we can track metrics at the building and individual lab level. Annual recycling audits for each lab would also be great.

Single stream for plastics and gloves that accepts hard plastics and plastic film. All lab plastics are labeled with symbol, only compatible plastics are used together in packaging, plastic packaging is not combined with paper, foil or tyvek lids.

on site by paid employees and volunteer groups (as a field trip or team building experience); takes Styrofoam, flexible plastics, glass, numbered plastics in single stream. cost-neutral at a minimum. also would like to divert red bag waste from landfill.

Being able to recycling all recyclable material even if it has been in contact with some hazardous material (within reason). Being able to recycling soft plastic and gloves etc. Have a 100% compliance rate with 0% cross contamination (landfill in recycling and/or recycling in landfill bins)

We have a robust recycling program to recycle: Pipet tip boxes, plastic media bottles, other plastic and metals, Styrofoam boxes, electronic waste, Chemicals, equipment and materials through ChEM Reuse program, water purification cartridges, paper, cardboard, many more.

all clean materials that have a recyclable potential are placed into one bin w/in each lab that someone / group of people sort through prior to vendor pickup; no trash containers in the lab; option to compost paper towels; consistent signage w/ appropriate photos and clear guidance

We need companies shipping these materials to our campus to step up and provide programs (not just any program, but a good program with good extended producer responsibility) to help us address these materials at the end of their useful life. We also need competing companies to work together so we only get one good solution to a type of material (rather than competing programs that leave us confused about what to do)..and the collaboration should involve the institutions having to deal with these materials as well. Ideally these programs should also be funded by companies shipping these materials to our campuses rather than placing the financial burden on the campuses.

Zero landfill waste with source separation for best value!

Having a 4th route truck to pick it up. All labs enrolled to bring it dock side.

clearly delineated guidelines: what can and can't be recycled, reused. Robust re-use program spearheaded by departments and labs, including coolers, freezers, solvents, etc. Lab level receptacles with clear rules about recycling. Incorporated into new lab member training, EH&S lab safety training and checks, etc.

Zero waste except chemicals that cannot be recycled.

Q19 - Please describe any regulatory or safety issues you've had with your lab recycling program? (e.g. RCRA concerns, sharps issues, contamination, etc.)

Please describe any regulatory or safety issues you've had with your lab re...

Nitrile glove recycling is limited to non hazardous and non-patient care labs. Our labshare program has occasionally been used as a dumping ground for class bottles with chemicals, mercury thermoments, and unopened packages of needles.

We've had the 3 you mention as examples, to a lesser extent the sharps concern. I don't think we've had any serious safety issues. Our biggest challenge is contamination.

we are concerned about chemical containers or other plastics contaminated by chemicals ending up in the recycling stream

People not removing all tape and labels from Styrofoam that they intend to recycle.

Can't recycle autoclaved materials even if they don't have physical contamination

Lots of contamination with non-plastic waste, residual liquid in lab containers, perception of hazard by vendor due to the nature of the business

contamination issues, when most solvent bottles could be recycled

We adhere to RCRA guidelines. Our EHS staff is well trained.

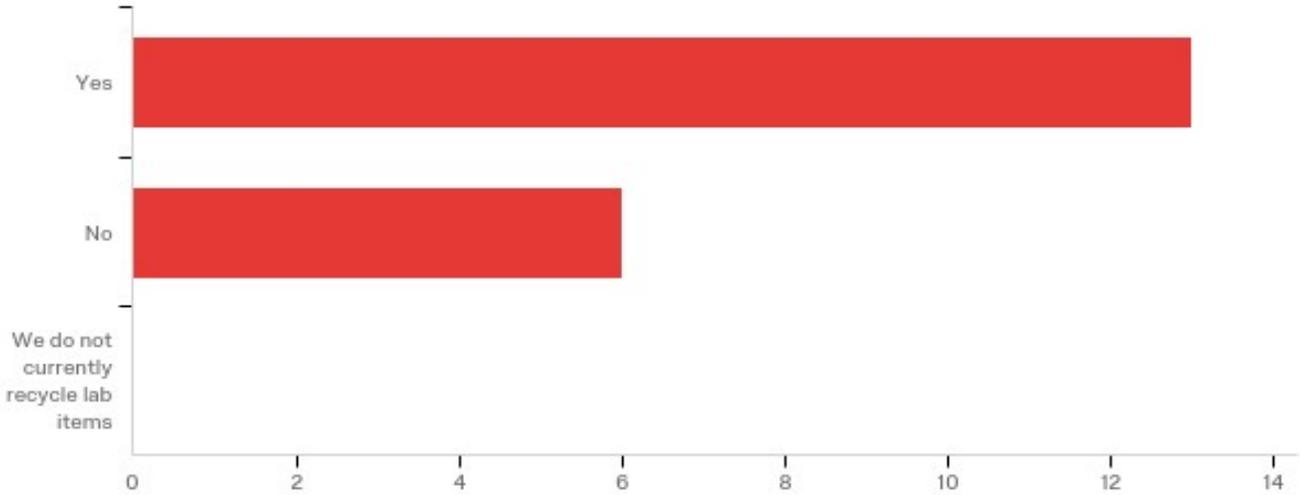
I believe there are rules that our EH&S team has had to study and then apply for permits to allow some of our solvent re-use, recycling. We are lucky to have their expertise and support!

Animal rooms have required some greater oversight by EH&S, but other than that no issues.

The usual; no incidents so far. I coined the motto, "If it's safe to throw out, then it's safe to recycle" which is generally true. It's super important to respect concerns and safety of MRF workers, for example.

Employees afraid of contamination.

Q21 - Is there a lab product supplier who has been helpful in your efforts to divert lab items from the landfill?

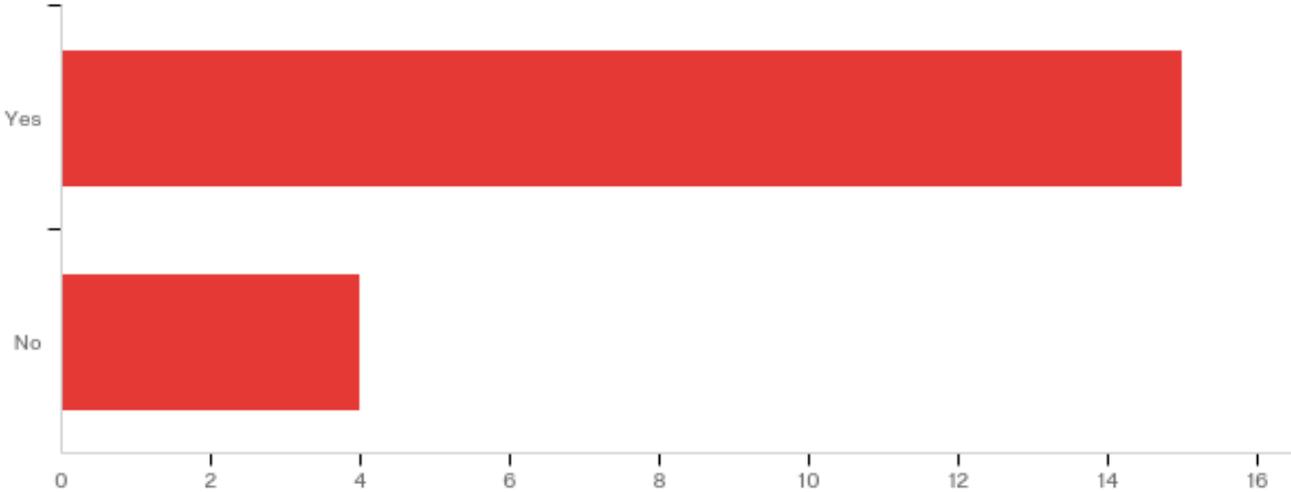


#	Answer	%	Count
1	Yes	68.42%	13
2	No	31.58%	6
3	We do not currently recycle lab items	0.00%	0
	Total	100%	19

Q20 - If possible, please provide a list of lab product suppliers you have worked with (or think would be interested in working with you) to help with landfill diversion efforts from the supplier side (i.e. packaging, materials, etc.)

If possible, please provide a list of lab product suppliers you have worked...
Kimberly Clark Fisher Scientific
New England Biolabs Millipore-Sigma VWR
Kimberly Clarke Starlab
Thermo Fisher (formally Life Technologies)
Cardinal
Thermo Fisher Sigma Miller
New England Bio Labs has helped with diversion of their styrofoam shipping containers, BUT not their cool/ice packs.
While still in early stages, it appears that ThermoFisher, VWR, MilliporeSigma, NEB, Addgene have real interest in working on solutions (on a large scale).
See earlier response. Triumvirate Could be interesting as they open up in the Bay Area. Yale and Harvard are using them. They are processing biomedical waste into fencing. Could be a good second life.
E&K Scientific, VWR, RightCycle
Kimberly Clark - gloves
VWR Fisher
VWR

Q23 - Are you interested in being more involved in lab landfill diversion efforts?



#	Answer	%	Count
1	Yes	78.95%	15
2	No	21.05%	4
	Total	100%	19

Q24 - If yes, please enter your name and email address

Name (first, last)	Email address
Joe Iosbaker	iosbaker@uic.edu
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