

NOVEMBER 2019

## Plastic Film Recycling at the NIH



The amount of plastic waste generated each year in America has rapidly increased since the 1960s, now totaling over 34 million tons per year.<sup>1</sup> Low recycling rates for plastic items (9.1%) further compound the environmental and human health issues associated with plastic waste.<sup>1</sup> A significant factor leading to the low recycling rate is the availability of recycling programs for different types of plastics. Items that are widely acceptable in household collections tend to have a much higher recycling rate, like the 30% rate for Polyethylene Terephthalate (PETE, #1) bottles.<sup>1</sup> The recycling rates for items that are not commonly accepted in commingled collections, like plastic bags, are significantly lower (estimated as low as 1%).<sup>2</sup> In an effort to increase our recycling rates, the NIH has established a program for recycling plastic films, which operates separately from commingled plastic collections.

Plastic films are most commonly made from high-density or low-density polyethylene, which are labeled as #2 and #4 plastics, respectively. However, not all plastic films will be labeled with a recycling symbol and not all #2 or #4 plastics are plastic films. The easiest way to identify whether a plastic film is suitable for recycling is to employ the "thumb test." To do this, press your thumb into the plastic material. If the plastic stretches, it is most likely an acceptable plastic film. If the material will not stretch and tears or rips, then it cannot be recycled as a plastic film. If there is any doubt about whether a material is a plastic film, the best practice is to place it in the trash. A few examples of plastic films are grocery bags, Ziploc/food storage bags, bread

bags, cereal bags, bubble wrap/air pillows, overwrap for paper towels/toilet paper, and plastic shipping envelopes (with labels removed). These items are typically not accepted in collections for rigid materials due to the issues they pose for separation at a Material Recovery Facility (MRF). Given their stretchiness, plastic films tend to get snagged and tangled in sorting machinery designed for rigid materials. This can damage the machinery and cause facility shutdowns, which decreases efficiency and raises the cost for recycling. For these reasons, it is crucial to only place plastic films in collections intended for these materials.

The NIH Plastic Film Recycling Program began with a few pilot collections across the Bethesda campus. These collections were successful and led to expansion into a full-fledged program. There are now over 19 collections for plastic films across the Bethesda campus, which average a total of around 1 ton of material each month. It is important to note these collections are only for plastic films, such as the items described above. Items like cellophane wrap, straws, compostable or biodegradable bags, Styrofoam and plastic bottles should not be placed in this collection. Rigid plastics should be placed in the mixed plastic/metal/glass collections. All plastic films must also be clean and dry.

A map of the current collection locations can be viewed [here](#). Please feel free to stop by any of these collections to recycle your plastic films. Additionally, new collections can be arranged by contacting the Division of Environmental Protection (DEP) at 301-496-7990. For small collections, NIH staff are encouraged to build-up a collection in a box or garbage bag until the load is full. A full collection can be scheduled for pick-up by calling 301-402-6349 or the plastic film can be taken to the Building 10 Supply Store. Large collections requiring pick-up more than once per week can be scheduled for a routine pick-up through DEP. Please contact DEP with any questions regarding this program.

## TAKE ACTION



### Certify Your Lab with the 2019 Green Labs Program

The 2019 Green Labs Program is open to all NIH labs to receive a certification based on green practices. Simply have a lab member fill out the self-assessment form linked to in the full article.

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## EVENT



### Celebrate America Recycles Day at the NIH

Upcoming activities for America Recycles Day will occur on many NIH campuses on or around November 15, 2019. The activities include recycling collections for items that may otherwise be difficult to recycle and plenty of information regarding recycling best practices. Click the link below for full details.

[LEARN MORE](#)

## NEMS TRAINING

**Did you know?** Only clean and empty items should be placed in recycling bins. Contaminated recyclables can cause entire loads to be discarded, creating much more waste than if only the single item had been thrown away. To learn more about recycling at the NIH, please visit the [NEMS Training webpage](#) to view a short (20 minute) NIH environmental awareness training video.