

County of Santa Clara

Recycling and Waste Reduction Commission
Integrated Waste Management Division

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DATE: October 19, 2012

TO: Recycling and Waste Reduction Commission

FROM: Karen Gissibl, Source Reduction and Recycling Subcommittee Chair

SUBJECT: Plastic Packaging Reduction Project

Background

In June, 2011 the Source Reduction and Recycling Subcommittee (SRR) of the Technical Advisory Committee (TAC) presented a comprehensive overview of the challenges in managing expanded polystyrene (EPS) foam food and beverage containers. SRR developed and proposed a four-tiered solution of progressive actions jurisdictions can take to eliminate EPS food containers from food service establishments and provided sample documents to help guide the implementation at different levels. In June 2011 the Recycling and Waste Reduction Commission (RWRC) approved the document and a letter recommending the tiered approach was sent to the County and Santa Clara County City Managers and Mayors. Several months later the RWRC revisited the issue of EPS and recommended changing the dates for each of the tiers to allow cities more time to implement the plan. The letter with the new dates was sent to the City Managers and Mayors in February 2012 which was also endorsed by the Santa Clara County Cities Association.

Since that time, San Jose and Sunnyvale staff have been given council approval to begin researching the feasibility of EPS food container bans. Palo Alto adopted a foodware plastic foam ban that was effective in April 2010. On May 8, 2012 the Santa Clara County Board of Supervisors approved an ordinance restricting EPS food and beverage containers in the unincorporated areas of the county. In addition, the cities of Palo Alto, San Jose and Sunnyvale began working collaboratively on a Plastic Packaging Reduction Project to minimize waste and water pollution resulting from foam and other plastic packaging received with the goods that their agencies purchase. SRR provided an overview of the packaging project to RWRC at the April 25, 2012 meeting and was asked for a comprehensive “package” of resources similar to the resources SRR provided for the EPS food container ban for use by jurisdictions.

This memo gives an overview of how cities can reduce plastic packaging from their supply chain and provides materials to assist with implementation. Palo Alto, Sunnyvale and San Jose hope to expand the network of cities who are asking their vendors to share in the responsibility of reducing packaging waste and to send a market signal that this is a priority for public agencies. This collaborative effort is coordinated by staff from the three cities responsible for zero waste and water pollution prevention programs in partnership with each city’s Purchasing Department and is driven by both policy goals and regulatory requirements.

Commissioners: Jamie McLeod, Chair; Ronit Bryant, Kansen Chu, Susan Garner, Jim Griffith, Linda J. LeZotte, Diane McNutt, Cat Tucker, Mike Wasserman, Gilbert Wong

Overview of the Plastic Packaging Reduction Project

The two main goals of the Plastics Packaging Reduction Project are to:

1. Ensure that public agencies minimize or preferably eliminate the amount of expanded foam and other plastic packaging they receive with their shipments of goods because of associated water pollution, waste and litter impacts, and;
2. Send a market signal to vendors that secondary and shipping plastics packaging is unwanted and to request that their supply chain—whether local or located overseas— minimize total packaging and specifically avoid plastic packaging—including foam—in the primary and secondary packaging. Primary packaging is that which is in direct contact with the goods that are purchased; secondary packaging is used to get the product from the manufacturer to the vendor.

Plastic Packaging Reduction Project components include several suggested actions and tools which can be used individually or together depending on the resources cities have to devote to this issue:

- **Collaboration within each agency's Purchasing Departments** to implement this program. In Palo Alto, the City Attorney's office is also involved in revising the Terms and Conditions involved with the product purchase.
- **A survey** to determine the current sources of expanded foam and other plastic packaging city staff receives in shipments. The survey can be given to warehouse and administrative staff that receive product shipments
- **Vendor communication to eliminate both primary and secondary packaging** while ensuring products are safely shipped.
- Developing/revising contract **Terms and Conditions and Liquidated Damages** in purchasing documents to include expectations of reduced plastic packaging and penalties if there are violations.
- Creating **internal agency processes** where project managers can be notified if shipments are received in unwanted packaging options.

Tiers of participation

Jurisdictions wishing to take action to reduce foam and plastic packaging can choose one or all of the following tiers to initiate packaging reduction efforts. Tiers 2 and 3 are progressively more aggressive in terms of expectations for vendors. Each tier can be altered to best meet the needs of the jurisdiction. Appendix A lists samples of the documents that are discussed further in this memo.

1. Tier 1

- a. **Meet with and educate Purchasing Department** and purchasing agents from each department about challenges with foam and plastic packaging.
- b. **Conduct an internal survey** on quantities of foam and other plastic packaging sources received from shipped products. See sample survey in appendix.
- c. **Share survey results** with staff letting them know how much foam and plastic packaging is being received in the city.

While this effort in itself will not spur a change in the supply chain, it can allow staff to assess how much foam they are receiving and prioritize action on the issue.

2. Tier 2—all of the above plus:

- a. With Purchasing Department's support and assistance, **send letters to all City vendors** encouraging reduced, reusable and recyclable* packaging and specifically the reduction/elimination of foam and plastic packaging in shipments. The letter can be an attachment that is sent out with all Requests for Quotes (or similar) for a period of time, or targeted to vendors that have been used in the past. See sample letter in Appendix A.
 - b. **Revise contract Terms and Conditions** as it relates to packaging expectations encouraging the use of recyclable* or reusable packaging in primary and secondary shipping/packing, and the minimization of packaging overall.
 - c. **Set up a tracking/reporting methodology** when purchases are received to identify foam or plastic packaging. This can invite the assistance of those who typically receive and unpack shipments of purchases.
 - d. Revise Environmentally Preferable Packaging policy language to include foam/other plastic packaging prohibition.
- 3. Tier 3– Can be used to send a clear expectation to vendors from the start or can be implemented if vendors don't reduce plastic packaging after efforts in Tier 2 are employed:**
- a. Revise language in Terms and Conditions that prohibits foam packaging and establishes liquidated damages if prohibited packaging is used.
 - b. Revise vendor letter to include a deadline for stopping use of foam/other plastic packaging.
 - c. Liquidated damages applied to vendors who fail to meet contractually required standards of performance.

* Recycling means that the hauler in that jurisdiction can accept the material at drop off or in its collection program.

Resources included as attachments in Appendix A to memo:

- Sample Liquidated Damages rate table (PA)
- Sample Terms and Conditions language (PA)
- Sample Vendor letter (PA)
- Sample survey (PA)
- Public Agency Benchmarking document – Benchmarking, research, guidance and definitions

Sample surveys, vendor letters, contract Terms and Conditions, case studies, and other related resources are also available at www.responsiblepurchasing.org.

Challenges with Recycling Foam Packaging

Local infrastructure to collect and recycle foam and/or other plastic packaging is difficult, expensive and has not been historically successful due to the many restrictions placed on acceptance of foam packaging and in some cases the necessity for expensive leased equipment needed to compact the material. While several attempts have been made to recycle the material in Santa Clara County cities, they have been usually abandoned due to space constraints for necessary equipment and/or infeasibly high standards for material cleanliness and lack of contamination that exceed nearly every other product that is recycled. The EPS Alliance stated themselves that it is a difficult material to collect.

Despite historical difficulties with recycling the material the City of Sunnyvale revisited the possibility in 2010 and conducted a site visit to Dart Container Corporation to observe a densification machine installed on its site. The densifier condenses clean expanded polystyrene (EPS) foam food and packaging

products into dense “logs.” This material is then sold to manufacturers that reprocess it into building insulation, plastic lumber, picture frames and molding, among other products.

After observing the operation staff concluded, that similar to concerns in previous years:

- There wasn’t enough space for the equipment and storage of foam prior to densification;
- Monitoring incoming material would require additional staff support to prevent material that had food contaminants and moisture being dropped off as well as material such as corn based packing peanuts and closed cell foam blocks that could contaminate the process; and
- It would be difficult to prevent the incoming material from ending up as litter due to its light-weight nature.

Furthermore, the manufacturing process that utilizes recycled EPS requires an additional 30% virgin material. In addition, there is no recycling market for products made with this mix of EPS at the end of their lifecycles (e.g., the picture frames that recycled EPS are often made from cannot in turn be recycled if the product breaks or is no longer useful).

Alternative Packaging

Alternative packaging options whether reusable, recyclable or compostable, do exist and continue to be developed. A few examples include:

- Paper packing peanuts made from craft paper (*papernuts.com*) or paper triangles made from post-industrial paper (*expandos.com*) can be recycled with paper in curbside and commercial paper programs.
- Mushroom based packaging material could potentially be composted in commercial composting programs (*ecovatedesign.com*).
- Reusable shipping containers are being used at grocery stores for produce. Safeway recently expanded the use of reusable shipping containers and eliminated over 17 million pounds of corrugated cardboard boxes. See http://www.pleasantonweekly.com/news/show_story.php?id=9551
- Take-back programs where the responsibility is placed on the vendor to take their packaging back. Seattle has a reusable shipping cart initiative as an example of a take-back program: <http://www.govtech.com/wireless/Seattle-Selects-Tablet-PCs-.html>

Meeting with the EPS Industry Alliance

In response to a presentation made at TAC about this project on January 26, 2012, Betsy Steiner, Executive Director of the EPS Industry Alliance sent letters to the Cities of Sunnyvale, Palo Alto, and San Jose, as well as the Santa Clara County Integrated Waste Management staff and RWRC members in April 2012. Her letter stated her concerns about intentions to ban foam packaging material and that substitute materials could result in increased environmental disadvantages. Information was provided on the benefits of EPS packaging. In addition, Ms. Steiner asked for the opportunity to meet and discuss the project further.

On June 10, 2012, a meeting was held at the SMaRT Station with Betsy Steiner, from the EPS Industry Alliance, Karen Gissibl from City of Sunnyvale, Julie Weiss from City of Palo Alto, and Linden Skjeie from City of San Jose. Ms. Steiner also invited several manufacturers of EPS packaging to attend the meeting. Ms. Steiner presented information on the EPS Transport Packaging Sustainability Initiative including recycling partnerships and drop-off locations (25 nation-wide), large volume recyclers (one in Northern California) and loose fill re-use programs (1500 nation-wide). She shared information on the environmental advantages of EPS including energy use for production and disposal, transportation efficiencies and avoidance of product damage from non-foam packaging. One of the manufacturers of

EPS packaging products provided information about ExoSix, apparently the only third party certified moldable EPS product on the market to contain 60%+ pre-consumer material (material that is generated and reclaimed in the manufacturing process).

Ms. Steiner asked that we consider changing the scope of the project from *EPS Foam Reduction Project* to *Plastic Packaging Reduction Project*, which the three cities agreed to do and in fact had already done prior to meeting with Ms. Steiner.

Next Steps

It is suggested that the County endorse the reduction of plastic packaging in City supply chains and offer the tools provided by the Plastics Packaging Reduction Project to be used as-is or modified as individual agencies need. The tiers can be phased in over a period of time depending on staff resources available to work on this issue. It is recommended that jurisdictions begin with Tier 2 as a starting point. If cities are able to, they can take a more assertive approach by implementing Tier 3.

Final Notes:

Plastic packaging including foam continues to contribute to most cities' solid waste streams, including those which have adopted Zero Waste policies. Plastic packaging is still a pollutant found in nearly every creek cleanup. It is ubiquitous and persists in the environment posing water quality and wildlife health issues. It is also a recurring hindrance to water quality agencies –many of which partner with Zero Waste programs programmatically–in achieving Municipal Regional Permit requirements of reducing trash by 100% by 2021. For these reasons, SRR encourages regional support for this project.