

Eliminating Single-Use Plastic Diapers from Waste Stream: Recommendations for Oceanside Zero Waste Plan

Problem

Assuming the City of Oceanside is similar in composition to the City of Sunnyvale, approximately 3.6% of total waste is composed of disposable diapers¹. In a house with a child in diapers, disposables make up 50% of household waste. With collection and disposal costs at around \$100-\$150 per ton², Oceanside currently spends between \$450,000 and \$675,000 handling disposable diapers. As disposable diapers won't decompose for at least 250-500 years, landfill maintenance costs will continue to accrue on these items well into the future.

As Oceanside approaches zero waste, the portion that disposable diapers represent will increase, as they cannot be handled through recycling or organic waste diversion.

Also, as population increases, so will diaper use and diaper collection and disposal costs.

Solutions

Fortunately, there are other solutions for diapering that don't add to the solid waste stream, specifically 100% reusable cloth diapers, which are currently used by 5-15% of diaper changes. There are a number of methods for encouraging reusable cloth diaper use as part of your overall source reduction efforts.

Note: Disposable diaper companies suggest that the reduction of waste through the use of cloth diapers is offset by an increase in water and energy use. Actually, lifecycle studies³ show that cloth diapers impact the environment less than disposable diapers, so Oceanside should feel confident that increases in local reusable diaper use will result in environmental gains even beyond waste reduction.

Educational and Technical Assistance Programs

Studies have shown that in-person introductions to cloth diapering are most successful early in pregnancy. Educational efforts are required to clarify the range of new cloth diapering systems available and to make up for the loss in cross-generational knowledge of reusable diapering practices.

- Offer free monthly cloth diaper classes for local families to learn about their options in cloth diapering and how to care for their diapers in the most environmentally friendly manner.

¹ Oceanside has ~5530 age 2.5 & younger (2010 census 39817 under 18; Sunnyvale has 31435 or 4366 under 2.5 <http://www.census.gov/popfinder/>)

Sunnyvale has 2536 tons of diaper waste per 2010 report (3.6% of 70444 total tons) (single family 4.2% 1007 tons, multifamily 3.1% 478 tons, commercial 3.3% 1031 tons) http://sunnyvale.ca.gov/Portals/0/Sunnyvale/DPW/recycling/SV_ReportUpdate_FINALV3KG.pdf

² Per Rick Anthony, 12/16/11.

³ <http://whatawaste.info/but-i-heard/flawed-impact-studies-review/>

- Work with the Tri-City Medical Center to have them incorporate cloth diaper training in their prenatal and/or childbirth classes.
- Highlight reusable cloth diaper support resources on your website and at Green Oceanside events. Also include educational materials regarding the benefits of cloth diapering.
- Work with Camp Pendleton to provide information and support about cloth diapers to incoming families.

Reusable Cloth Diaper Incentives

While cloth diapers will cost less for families in the long term, there is the initial investment which can be an obstacle.

- To encourage more families to choose reusable cloth diapers, offer a subsidy on the purchase of cloth diapers through a local business. For example, Oceanside should offer a \$100 voucher⁴ for families with a baby 18 months or younger.
- For families concerned about diaper care in the early days, offer families with babies 6 months or younger a free trial with a local diaper laundering service⁵.

Oceanside could also build in a success benchmark where, for every 10% reduction in diaper waste, the incentive can be lowered by 10 percent and the disposable tax increased thus helping to create a critical mass in public opinion and more importantly personal action. The increased revenue could be used to help fund other cultural shift projects or any other programs that support the city's zero-waste goal.

Reduce Institutional Disposable Diaper Use

Work with Tri-City Medical Center, local daycare providers, and elder care homes to encourage the use of reusable cloth diapers in their facilities.

- Encourage cloth diaper education programs within these institutions.
- Encourage institutional contracts with local diaper laundering services to use reusable cloth diapers in-house.

Cloth Diaper Business Support

Provide incentives for local businesses making and selling reusable cloth diapers.

- Make available low-cost cloth diaper business loans and support cloth diaper product marketing through the Recycling Market Development Zone (RMDZ) program.

⁴ Assuming an average of 2.5 years in diapers, each baby will produce roughly 2.5 tons of diaper waste. (7 oz. per diaper, 8 diapers per day, 2.5 years = 3185 pounds). Even if babies only use cloth diapers 60% of their diapering career, Oceanside will still see roughly a ton less diaper waste, saving \$100-\$150 in collection and disposal costs. Instead, that money will be redistributed to support local businesses providing reusable diapers. Cloth diaper usage over 60% of diapering career represents savings for families and for Oceanside. (Note the similarity to a compost bin subsidy.)

Average cloth diapering costs run about \$300 for a first baby, less for subsequent babies (because of reuse).

⁵ There are three local diaper laundering services serving Oceanside as of 12/11: Beach Bums Diaper Service (<http://beachbumsdiapers.com/>), Earthy Baby Diaper Service (<http://www.earthy-baby.com/home.php>), and Precious Bottoms Diaper Service (<http://preciousbabybottoms.com/>).

Support Cloth Diaper Laundering

Encouraging the use of reusable cloth diapers requires that facilities are available for washing diapers.

- Encourage designation of washing machines and dryers at local Laundromats specifically for washing cloth diapers.
- Require all local hotels to make laundry facilities available to visitors.

Disposable Diaper Ban / Extended Producer Responsibility

Ban the disposal in Oceanside of throwaway diapers as they are not recyclable or compostable.

- Recommend the sale of reusable cloth diapers by all retailers currently carrying disposable diapers.
- Require retailers who still want to sell disposable diapers to take them back at the point of sale.

Disposable Tax

Institute a Zero Waste Tax on disposable products, including disposable diapers, sold locally. Revenues could be used to fund education or incentive programs.

Pay As You Throw Diaper Waste

As other zero waste plans remove recyclables and organics from the residual waste stream, the move to bi-weekly residential solid waste collection would become the norm. Offer weekly collection of residential solid waste on a subscription fee basis for the subset of residents continuing to use disposable diapers.

Conclusion

While not all of the above programs may be necessary to change diapering practices and move toward zero waste in Oceanside, several may be used simultaneously to initiate the cultural shift toward reuse. Once the shift has been achieved, reusable cloth diapers will become the norm making the waste reduction benefits for the City of Oceanside permanent.