



DART CONTAINER CORPORATION OF CALIFORNIA

QUALITY PLASTIC PRODUCTS

150 SOUTH MAPLE STREET

CORONA, CALIFORNIA 92880

PHONE (951) 735-8115

July 6, 2012

VIA E-MAIL

Bruce Wolfe
Executive Officer
San Francisco Bay Regional Water Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Re: Water Board Staff Review of Trash Plans and Reports

Dear Mr. Wolfe:

Dart Container Corporation of California (“Dart”) submits this letter in response to the San Francisco Bay Regional Water Quality Control Board’s (“Regional Board”) June 7, 2012 letter to Municipal Regional Stormwater NPDES Permit (Order R2-2009-0074) (“MRP”) Permittees. The letter presents the Water Board Staff’s review of the Bay Area Stormwater Management Agencies Association’s (“BASMAA”) February 2012 MRP submittals and related individual plan submittals by the permittees. The Staff Review finds that these submissions “all have significant deficiencies, and, as such, they do not comply with the requirements of the [MRP].”¹ Dart agrees with that assessment. The Staff Review finds further “an over reliance on formulas and fixed-credit amounts for trash reduction actions”² and concludes, “[m]ost importantly, implementation of the Permittee Plans will not attain the 40 percent trash load reduction by July 2014.”³ Dart agrees with these conclusions as well.

Inexplicably, and without justification, the Staff Review nevertheless grants conditional acceptance to proposed automatic load reduction credits for municipal bans of polystyrene foam food service ware, even though these foam ban credits have no support in the administrative record. Dart submits this letter to point out flaws in this portion of the Staff Review, and to request a workshop and hearing regarding the proposed foam ban credits.

Summary of Key Points

The Staff Review contains the following critical deficiencies:

¹ Letter from Bruce H. Wolfe, Executive Director, San Francisco Bay Regional Water Quality Control Board, to Municipal Regional Stormwater NPDES Permit (Order R2-2009-0074) Permittees, at p. 1 (June 7, 2012) [hereinafter Staff Review].

² *Id.* at p. 2.

³ *Id.* at p. 1.

- No awareness of State-funded research showing that foam bans are ineffective, because, among other reasons, a substitution effect whereby an alternative product replaces the banned foam product in waterways.
- No awareness that BASMAA arbitrarily selected the number for the foam ban credit, in closed-door discussions without scientifically defensible data.
- No awareness that alternatives to a foam ban, such as recycling programs, are viable and successful, as demonstrated by over 40 cities in California that have curbside recycling programs for foam products, including foam food products.
- Flawed reasoning and no scientific support for the conclusion that the proposed foam ban credits are “reasonable.”
- Inconsistent and inadequate analysis of the foam ban control measure when compared with the more rigorous and thoughtful analysis of other proposed control measures.
- No awareness of the environmental benefits of foam products.
- No awareness that acceptance of scientifically unsupported foam ban credits would violate several federal and state legal requirements.

CalRecycle Has Found that Foam Bans Are Not Effective

The Staff Review is inconsistent with findings published by the California Integrated Waste Management Board’s (now “CalRecycle”). The State Legislature commissioned CalRecycle to evaluate the scientific support for various litter reduction efforts, including a comprehensive assessment of issues pertaining to the use and disposal of polystyrene foam in California. This study found, after reviewing life cycle analyses of foam and other products, that “[i]n many cases, PS [polystyrene] is superior in a variety of ways to several alternative products.”⁴ CalRecycle found that product bans, like the various foam bans at issue here, are “generally not an effective long-term solution.”⁵ The Staff Review’s assumption that foam bans actually reduce trash reflects an unawareness of the CalRecycle Report’s conclusions and logic. Any departure from the prior research and findings by CalRecycle should be based on credible empirical data and sound analysis. As explained further below, both are lacking here.

The Staff Review’s Acceptance of Foam Ban Credits Lacks Substantial Justification

While Dart agrees with many of the Staff Review’s general comments regarding the deficiencies in BASMAA’s MRP submittals, the Staff Review’s justifications for accepting in

⁴ CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD, USE AND DISPOSAL OF POLYSTYRENE IN CALIFORNIA, A REPORT TO THE CALIFORNIA LEGISLATURE 19 (Dec. 2004), *available at* <http://www.calrecycle.ca.gov/publications/Plastics/43204003.pdf> [hereinafter CALRECYCLE REPORT].

⁵ Staff Review, *supra* note 1, at p. 6.



principle CR-2 (Polystyrene Foam Food Service Ware Ordinances) lack any scientific basis. The Staff Review asserts that permittees may claim automatic load reduction credits for foam bans for the following reasons:

- (1) the “credits are within a reasonable range given the amount of [foam food ware] found in trash loads”; and
- (2) the “difficulty of adoption and implementation of a strong set of restrictions on the use” of polystyrene foam food ware.⁶

While the Staff Review notes that the proposed foam ban credits are contingent on verification and reporting, there is no basis for conditional acceptance of control measures that have no credible scientific support. As explained below, both of the Staff Review’s reasons for accepting (even conditionally) the proposed foam ban credits lack credible scientific support. In addition, these reasons contradict the conclusions of state-funded research and other scientific evidence.

As both industry and environmental commenters noted, there is no evidence that supports the foam ban credit. BASMAA did not demonstrate the link between a foam ban and an actual reduction in trash loads. The amount of polystyrene foam food ware found in trash loads is not the appropriate measure—the proper focus should be on how much trash will actually be reduced as a result of the control measure. BASMAA’s submittals ignore the substitution effect that will occur with a foam ban. As explained in Dart’s prior comments, the mere fact that a product is found in waterways does not mean that the prohibition of that product will result in a proportionate reduction in total trash load. To the contrary, the banned product will merely be replaced by another product, resulting in no actual reduction in litter.⁷ The BASMAA submittals ignored this important and well-documented principle, and the Staff Review has as well.

Furthermore, the amount of the proposed foam ban credit does not comport with reality. Some permittees are using the foam ban credit to claim up to a 10% reduction in their trash loads (and such credits account for up to 21% of the total trash load reduction claimed),⁸ but BASMAA’s own baseline methodology (which Dart contends—and the Staff Review agrees—is

⁶ *Id.*

⁷ MICHAEL HARDING, COMMENTS ON BAY AREA STORMWATER MANAGEMENT AGENCIES ASSOCIATION’S PRELIMINARY BASELINE TRASH GENERATION RATES FOR SAN FRANCISCO BAY AREA MS4S AND TRASH LOAD REDUCTION METHOD, at p. 3 (Mar. 20, 2012), *available at* http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/MRP/02-2012/Comments/Dart/MHR.pdf [hereinafter HARDING COMMENT LETTER]. *See also* HDR, THE CITY OF SAN FRANCISCO STREETS LITTER RE-AUDIT (July 4, 2008), attached hereto as Exhibit A. This study shows that San Francisco’s foam ban did not decrease litter; substitutes for foam food containers increased in the surveyed litter after the ban was enacted. *See id.* at p. 34 (Table 3.2.2, table showing that after ban foam cups decreased by a small amount in litter survey, and alternatives for foam cups increased by larger amount). *See also* DART, FACTSHEET REGARDING FOAM BANS, attached hereto as Exhibit B.

⁸ *See* DART, PERCENTAGE REDUCTION CREDIT FOR POLYSTYRENE AND PLASTIC BAG BANS RELIED UPON TO MEET REGIONAL BOARD TRASH LOAD REDUCTION REQUIREMENT (Mar. 20, 2012), *available at* http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/stormwater/MRP/02-2012/Comments/Dart/Matrix.pdf [hereinafter DART COMMENT LETTER MATRIX].

fundamentally flawed)⁹ found that polystyrene foam constituted only 6% or 7% of trash volume.¹⁰ Contrary to the Staff Review’s assertion that the foam ban credit is “reasonable,” such credits are clearly overstated. As San Francisco Baykeeper noted, these load reduction credits are impermissible because they “were developed internally by BASMAA and its members, generally in the absence of scientifically defensible data.”¹¹ Finally, as noted below, there is no way to ascertain whether a 10% credit for 6% of trash volume constitutes a “reasonable” range when the methodology used to measure the baseline trash volume is fundamentally flawed. Accordingly, the foam ban credit is arbitrary, and the Staff Review erred in not rejecting it.

The Staff Review’s assertion that the foam ban credit is justified because of the “difficulty of adoption and implementation of a strong set of restrictions on the use” of polystyrene foam food ware is a similarly flawed rationalization unsupported by any evidence. An otherwise unsupported and arbitrary load reduction credit does not become permissible merely because the permittees assert that it is “difficult” to implement a measure that is not a ban. Moreover, product stewardship and foam recycling were specific recommendations by CalRecycle in lieu of a foam ban, and 45 cities in California now have curbside recycling for polystyrene foam containers, including foam food containers. These recycling programs provide empirical proof disproving the notion that it is “difficult” to adopt and implement alternative strategies to control the use and disposal of polystyrene in California.

The Staff Review Applies an Inconsistent Level of Analysis in Evaluating Control Measures

Dart agrees with several broad principles the Staff Review sets forth for evaluating control measures, but is disappointed that these principles are not applied uniformly to all the control measures. According to the Staff Review, the Tracking Method must provide “justification for the proposed credits and representative and strategic monitoring to subsequently quantify the trash load reduction benefit per unit of defined action”¹² “There

⁹ See Staff Review, *supra* note 1, at pp. 2–4; AMERICAN CHEMISTRY COUNCIL, COMMENTS OF THE AMERICAN CHEMISTRY COUNCIL “PRELIMINARY BASELINE TRASH GENERATION RATES FOR SAN FRANCISCO BAY AREA MS4S” TECHNICAL MEMORANDUM AND “TRASH LOAD REDUCTION TRACKING METHOD: ASSESSING THE PROGRESS OF SAN FRANCISCO BAY AREA MS4S TOWARDS STORMWATER TRASH LOAD REDUCTION GOALS” TECHNICAL REPORT (VERSION 1.0), at pp. 6–20 (Mar. 20, 2012), *available at* http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/MRP/02-2012/Comments/ACC_Attachment.pdf [hereinafter ACC COMMENT LETTER].

¹⁰ BAY AREA STORMWATER MANAGEMENT AGENCIES ASSOCIATION, PRELIMINARY BASELINE TRASH GENERATION RATES FOR SAN FRANCISCO BAY AREA MS4S 10 (Feb. 10, 2012), *available at* http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/stormwater/MRP/02-2012/BASMAA/Baseline_Trash_Loads.pdf [hereinafter BASELINE REPORT].

¹¹ Letter from Ian Wren, Staff Scientist, & Abigail Blodgett, Associate Attorney, San Francisco Baykeeper, to John Muller, Chairman, San Francisco Bay Regional Water Quality Control Board, at p. 2 (Mar. 20, 2012), *available at* http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/MRP/02-2012/Comments/SF_BayKeeper.pdf [hereinafter BAYKEEPER COMMENT LETTER].

¹² Staff Review, *supra* note 1, at p. 5 (emphasis added). See also Staff Review, *supra* note 1, at p. 4 (“[T]he method must specify appropriate qualifying, siting, and level of implementation criteria and conditions for each trash reduction measure.”) (emphasis added).

also must be quantification of the trash loads avoided or reduced by all measures.¹³ The Staff Review also correctly notes that “there is an over reliance on formulas and fixed-credit amounts for trash reduction measures when actual trash volume collected can be directly measured.”¹⁴

The Staff Review fails to apply these rigorous standards in analyzing the foam ban credit, thereby providing an inconsistent level of analytical rigor in evaluating the control measures. For example—regarding quantification and proper reliance on actual trash volumes—the Staff Review states repeatedly, “load reductions should be quantified rather than based on credits” in the context of explaining why CR-4 (Activities to Reduce Trash from Uncovered Loads), CR-5 (Anti-Littering and Illegal Dumping Enforcement Activities), and CR-6 (Improved Trash Bin/Container Management Activities) are deficient.¹⁵ Dart agrees with the general proposition that load reductions should be quantified rather than based on credits, particularly when there is substantial doubt as to the actual effectiveness of foam bans, as noted in the CalRecycle Report. “Incentive-based load reduction credits”¹⁶ may be appropriate where the incentive-based credit is used to induce a permittee to enact a proven, effective trash control or reduction measure, such as structural Best Management Practices. But in this context, an automatic load reduction credit for a foam ban is wholly inappropriate, particularly given the State-supported conclusion that such bans are ineffective in reducing litter.

The Staff Review also states (correctly) that BASMAA’s Tracking Method is deficient because, among other reasons, it allows “some Permittees to reach the 40 percent trash reduction from baseline level on paper with few or no new actions.”¹⁷ The Staff Review then applies this principle in critiquing CR-5 and CR-7—but not to CR-2 (the foam ban credit).¹⁸ Some permittees who are claiming substantial automatic load reduction credits—as much as 10%—for a foam ban are relying on ordinances enacted substantially before the MRP’s effective date on December 1, 2009 (i.e., *as far back as 1993*). The Staff Review correctly notes that the “Permit’s intent is for non-early implementers to catch up, rather than to provide a grace period to early implementers.”¹⁹ Dart asks that this principle be applied equally to foam products as it is to other control measures.

As a final example—regarding representative and strategic monitoring—the Staff Review widely pans BASMAA’s Baseline Report,²⁰ but fails to apply the implications of a defective baseline to the proposed foam ban credit. The Staff Review correctly points out numerous flaws

¹³ *Id.* at p. 4 (emphasis added). Dart and other industry and environmental commenters previously addressed these issues of representative sampling and monitoring, scientifically defensible quantification methodology, and the requirement to actually reduce or avoid trash (vice replacing one type of trash with another) in comment letters to the original BASMAA submittals in February of this year.

¹⁴ *Id.* at p. 2.

¹⁵ *Id.* at pp. 6–10.

¹⁶ *Id.* at p. 8.

¹⁷ *Id.* at p. 5.

¹⁸ *See id.* at pp. 6–8.

¹⁹ *Id.* at p. 5.

²⁰ *Id.* at pp. 2–4.

in BASMAA's baseline methodology,²¹ including the fact that BASMAA's sampling methodology is non-representative and biased.²² But the Staff Review inexplicably goes on to accept the proposed foam ban credits as "reasonable" even though the amount of the credit (excessive even assuming these baseline measurements are scientifically valid) is predicated on a methodology that everybody, except for BASMAA and the permittees, agrees is fundamentally flawed.²³

Dart appreciates many elements of the analysis in the Staff Review as thoughtful and logical. But inexplicably this level of analysis was bypassed for the evaluation of the foam-ban control measure. Dart asks that the Regional Board apply the same level of thought and analytical rigor to evaluating the proposed foam ban credit as it did to evaluating the other proposed control measures.

The Staff Review Ignores the Environmental Benefits of Foam

The Staff Review's analysis of the foam ban credit is necessarily incomplete without a full understanding of the environmental benefits of foam products. As CalRecycle noted, polystyrene foam has many environmental benefits when compared with its alternatives, including benefits related to reduced energy use, air emissions, and water use.²⁴

Furthermore, the Staff Review seems to lack awareness that polystyrene foam not only is capable of being recycled, but in fact is actually being recycled successfully in cities and counties across California. Dart and many California cities and counties have made great strides in litter education and recycling across California, and Dart's product stewardship efforts in recent years are award-winning campaigns: in both 2010 and 2011, CalRecycle awarded Dart

²¹ See DART, COMMENTS ON BAY AREA STORMWATER MANAGEMENT AGENCIES ASSOCIATION'S PRELIMINARY BASELINE TRASH GENERATION RATES FOR SAN FRANCISCO BAY AREA MS4s, TRASH LOAD REDUCTION TRACKING METHOD AND PERMITTEES' SHORT-TERM TRASH LOAD REDUCTION PLANS 8 (Mar. 20, 2012), *available at* http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/stormwater/MRP/02-2012/Comments/Dart/Comment.pdf [hereinafter DART COMMENT LETTER]; ACC COMMENT LETTER, *supra* note 9, at pp. 6–20; *id.*

²² Staff Review, *supra* note 1, at p. 3 ("The baseline trash load estimates are based on data from relatively few inlets and storm events."); *e.g.*, ACC COMMENT LETTER, *supra* note 9, at pp. 8–10.

²³ BASELINE REPORT, *supra* note 10, at 10.

²⁴ See also THE BRATTLE GROUP, ECONOMIC ANALYSIS OF SB568'S PROPOSED POLYSTYRENE BAN, at 6 (Aug. 15, 2011), *available at* http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/MRP/02-2012/Comments/Dart/BGR.pdf [hereinafter THE BRATTLE GROUP REPORT]; THE BRATTLE GROUP, LETTER REPORT (July 3, 2012), attached hereto as Exhibit C; DART, FACTSHEET REGARDING LIFE CYCLE ANALYSIS FOR POLYSTYRENE FOAM (2007), attached hereto as Exhibit D.



with the prestigious CalRecycle WRAP (Waste Reduction Award Program) Award.²⁵ These and other benefits of foam products are explained in more detail in previous comment letters.²⁶

Acceptance of Automatic Credits for Foam Bans Will Result in Violations of Federal and State Law

If permittees are allowed to proceed with automatic foam ban credits, several violations of federal and state law will occur. First, as noted above, foam products have several environmental advantages over potential substitutes. Therefore, banning foam risks a variety of potential negative environmental consequences. These consequences include increased energy use, air emissions, water use, and trash in waterways. A proper environmental impact report (“EIR”) is needed to evaluate those potential negative impacts and provide a sound, scientific basis for a fully informed decision. We believe such an EIR would support the continued use of polystyrene foam food containers.

Further, we believe that BASMAA’s submittals, even if revised to address the Staff Review, will still violate the Clean Water Act, the MRP, and the Regional Board’s Basin Plan because there is no scientific support for the notion that a foam ban will result in an actual reduction in the total trash load. The Clean Water Act, the MRP, and the Basin Plan do not permit the use of ineffective, illusory, or scientifically indefensible measures. The legal deficiencies in BASMAA’s and the permittees’ submittals are explained in more detail in our and other comment letters.²⁷

Conclusion: A public workshop and hearing are necessary

We understand that the Regional Board plans to hold a workshop on these issues, and we applaud this measure. A public hearing and workshop may resolve many of the issues outlined in this letter, and an early resolution of these issues is required. These ill-conceived and misguided bans now threaten to undermine the recycling and product stewardship efforts of Dart and various municipalities around California. And worse, such bans threaten to produce significant negative environmental consequences that are not being properly assessed. Real progress towards reductions in the total trash load will not occur if permittees employ illusory measures that reduce trash only in an artificial accounting scheme rather than effective, proven measures. Furthermore, the Water Code requires the Regional Board to hold a public hearing on

²⁵ Press Release, Dart Container Corp. Receives Second Consecutive Recognition as CalRecycle WRAP Recipient (Jan. 4, 2012), [http://www.dart.biz/web/enviro.nsf/files/CalRecycleAward-PR.pdf/\\$FILE/CalRecycleAward-PR.pdf](http://www.dart.biz/web/enviro.nsf/files/CalRecycleAward-PR.pdf/$FILE/CalRecycleAward-PR.pdf).

²⁶ *Comments on Trash Load Reduction Reports*, SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD, http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/MRP/02-2012/Comments/index.shtml (last visited June 26, 2012).

²⁷ See, e.g., ACC COMMENT LETTER, *supra* note 9; BAYKEEPER COMMENT LETTER, *supra* note 11; HARDING COMMENT LETTER, *supra* note 7; DART COMMENT LETTER, *supra* note 21.

BASMAA's and the permittees' submittals in its review, approval, and incorporation of the final, approved documents into the MRP as binding and enforceable permit terms.²⁸

A workshop will provide the Regional Board and the public a unique opportunity to collaborate and try to resolve some of the challenges in formulating an effective plan to reduce the total trash load in the Bay Area. A public workshop will bring together various experts in the field to help achieve a more comprehensive and nuanced understanding of many of the questions and problems presented by the proposed foam ban credits and in other public comments.

Accordingly, Dart requests that the Regional Board hold an official workshop and hearing on the proposed foam ban credits, in order to evaluate the appropriateness of this credit in light of the scientific evidence.

We thank you for considering this letter, and we look forward to meeting with you to discuss the foam ban credits and the issues raised in this letter. If we misunderstand any parts of the Staff Review, we hope to discuss any misunderstanding at our meeting. If you have questions, you may reach me at (949) 262-3255 or Jonathan.Choi@dart.biz.

Sincerely yours,



Jonathan R. Choi
Regional Manager, Western Region Government
Affairs & Environment

²⁸ See WATER CODE § 13384; *Waterkeeper Alliance, Inc. v. Env'tl. Prot. Agency*, 399 F.3d 486, 498–502 (2d Cir. 2005); *Env'tl. Def. Ctr., Inc. v. Env'tl. Prot. Agency*, 344 F.3d 832, 854–56 (9th Cir. 2003); see also DART COMMENT LETTER, *supra* note 21, at p. 3.

