

## **Boilerplate MOU: Formulators for Institutional Laundries**

# **MEMORANDUM OF UNDERSTANDING BETWEEN [FORMULATOR COMPANY] AND U.S. ENVIRONMENTAL PROTECTION AGENCY DESIGN FOR THE ENVIRONMENT PROGRAM**

### **1 Statement of Purpose**

The purpose of this Memorandum of Understanding (“MOU”) is to set forth the basis, terms, and goals of the Design for the Environment (“DfE”) Program partnership between [Formulator Company] (“ ”) and the U.S. Environmental Protection Agency (“EPA”). The partnership is part of a DfE safer chemical use initiative for the industrial and institutional laundry sectors. The basic goal of this initiative is to seek and promote innovative chemical products, technologies, and practices that benefit human health and the environment.

A key purpose of the [company name]-EPA/DfE partnership is to recognize and encourage the environmentally preferable chemistry exemplified by [company name]’s [product name] detergent. This partnership will strive to promote and continually advance the environmental, technological, and efficiency benefits of [product name].

This MOU describes in general terms how [company name] formulates [product name], the environmental and human health benefits of this product, and how and the EPA/DfE will work together to continually improve its health and environmental profile and expand its use.

## 2 Statement of Context and Challenge

Each year, laundry product formulators use billions of pounds of chemical ingredients to make detergents; ultimately, these chemicals are released to the environment in laundry waste water. The EPA is concerned about the effect these chemicals might have on the quality of the environment, the biodegradability of laundry effluents, and laundry room worker health and safety.

Formulators for institutional laundries can improve the environmental and health profile of their products by using ingredients that are inherently less toxic, less environmentally persistent, less bioaccumulative, and that degrade to substances with similar beneficial characteristics when compared to ingredients used in conventional formulations. Environmentally oriented reformulation coupled with energy efficiency, resource conservation, and sound management practices offer the components for measurable and sustainable improvement in cleaning products and programs.

Conventional detergent formulations for the institutional sector often rely on a number of ingredients whose environmental and human health profiles can be improved. For example, highly alkaline chemistry, commonly a base for institutional detergents, is corrosive, posing a threat to health and the environment. Poorly degradable surfactants and softeners threaten aquatic life. Concentrated chlorine is highly caustic and volatile and may react with other compounds, posing a risk to workers, and if released to the environment, is very toxic to aquatic organisms.

{Specific challenges, contexts, or motives for change should be discussed here.}

## 3 [Company name]'s Improved Laundry Chemistry

[Company name] has developed an improved cleaning system for institutional laundries based on the unique properties of its [product name] formulation. For hospitals, hotels and other institutional facilities, [product name] offers a number of health and environmental advantages over conventional formulations: {for example--} [it replaces a highly alkaline-base with neutral pH ingredients, eliminates chlorine bleach by substituting organic peroxide, and uses a surfactant with linear alkyl hydrophobic components that biodegrade without harmful byproducts.]

{Additional description} [Elimination of chlorine means less deterioration of fabrics, less suspended solids in the wastewater effluent, and of course no harmful chlorine byproducts. Less fabric deterioration also means less lint, which may be a fire hazard in the dryer and harmful to laundry room workers when inhaled. Further, [product name]

works at lower temperatures and with fewer wash cycles than conventional formulations, which saves water and energy. In addition to reducing suspended solids, [product name] lowers biological oxygen demand and chemical oxygen demand in effluent waters, which benefits sewer treatment.] (For more information on the attributes and benefits of [product name], see section 7.)

*Note: EPA/DfE relies solely on [company name], its integrity and good faith, for information on the composition, ingredients, and attributes of [product name]. EPA/DfE has not independently identified the ingredients in the [product name] formula nor verified any of [company name]'s claims concerning the product's efficiencies, performance, or biocidal properties. EPA/DfE expresses its judgment and professional opinion only as to the environmental and human health characteristics of [product name]'s ingredients.*

#### **4 [Company name]'s Commitment to Formulate for the Environment**

As part of the [company name]-EPA/DfE partnership, [company name] agrees to formulate and produce its [product name] detergent using ingredients with a more positive environmental profile. A generic description of [product name]'s ingredients and their attributes appears below and is intended to reflect the actual composition of [product name] at the time of this agreement.

In the interest of maintaining the non-confidential nature of the MOU, [company name] has sent to EPA, in a separate document, the specific and complete chemical composition for its [product name] product. [Company name] reserves the right, however, to change the ingredients provided that their environmental profile is equal to or better than the current formulation and that any substitution occurs in consultation with EPA.

[Company name] will make available to the EPA the composition of [product name] on an as-needed basis or whenever significant changes in formulation occur. EPA will keep confidential all product formulas and other proprietary information that [company name] furnishes to the Agency.

The following is a non-confidential description of the ingredients in [product name] and their environmental and health characteristics, as available:

	<u>Component</u>	<u>Generic Description</u>
{For Example--}		
[Product name]	Surfactant	Readily biodegradable, straight carbon chain
	Builder	Does not cause eutrophication
	Oxider	Biodegradable
	Solvent	Biodegradable, lower toxicity
	Bleach	Non-chlorine
	Optical Brightener	See sec. 5
	Conditioning Agent	Biodegradable
	Enzymes	Neutral pH, not bioavailable

Adoption and use of the formulation agreed to in this MOU does not preclude, nor should it impede, [company name] in its efforts to further improve the environmental profile of the [product name] formula. In fact, a main element of the [company name]-EPA/DfE partnership is to provide [company name] the opportunity to work with EPA chemists, environmental scientists, and other staff in investigating materials to further improve the environmental profile of its products.

## **5 Continuous Environmental Improvement**

[Company name] will make continuous environmental improvement an important element of its research and development activities. EPA/DfE recognizes the many challenges companies face in reformulating their products. Changes in product formulation must be undertaken cautiously and in increments so as not to alter the important interactions among ingredients and ultimately performance.

In addition to the environmentally oriented formulation set forth in section 4, [company name] agrees to investigate the feasibility of making additional improvements in the environmental and health profile of [product name]. Specifically, [company name] will consider use of alternative {for example} [solvents and fabric brighteners], as recommended by EPA/DfE. [Company name] will undertake this formulation review within \_\_\_\_ from the date of signature of this MOU.

[Company name] agrees to explore, on a on-going basis, ways to further improve the environmental profile of its laundry products. [Company name] may consult with EPA/DfE about other products for use in the institutional laundry sector and, following Agency review and assessment, may request that one or more be added to this agreement. With EPA/DfE's approval, this MOU may be amended as set forth in Section 11.

[Company name] and EPA/DfE agree to discuss on a biannual (twice yearly) basis the status of [company name]'s reformulation research and continuous improvement activities. [Company name] may, at any time, request consultation and technical assistance from EPA in determining which detergent ingredients possess more positive environmental characteristics. [Company name] may use the DfE's Considerations for Partnership paper as a general guide to environmentally desirable attributes for laundry detergents.

## **6 Formulator Right to Know**

Laundry detergent formulators have a right to know the properties and potential risks--to their employees and communities--of the chemicals they use. Manufacturers of raw materials for laundry detergents have a responsibility to ascertain and communicate the potential toxicity of their products, especially those made and sold in large quantities.

As part of its partnership with EPA, [company name] agrees to ask its raw material suppliers for test data on the chemicals they sell and that [company name] uses in its products. If the raw material suppliers do not have test data on their chemicals, [company name] shall encourage them to perform basic toxicity testing (a basic toxicity profile for detergent chemicals should include: acute and chronic toxicity, developmental and reproductive toxicity, mutagenicity, ecotoxicity, environmental fate, and endocrine disruption).

[Company name] will share with EPA any chemistry or toxicity information on its ingredients that it obtains from its suppliers. Based on this information, [company name] will consider revisions to its product materials and warning statements, as appropriate.

## **7 End-User Benefits**

[Company name]'s [product name] offers end-users the following set of benefits:

{For Example--}

### Environmental Protection

[Product name] uses biodegradable raw materials and operates at neutral pH throughout the entire wash cycle. Its ingredients have a (consistently/generally) positive environmental and health profile and biodegrade to compounds with similar characteristics.

### Resource and Energy Conservation

Lower processing temperatures, more efficient washing, longer fabric life yield savings in water, energy, and other resources . . . Elimination of both a chlorine bleach step and antichlor follow-up treatment reduces the wash time by \_\_\_ minutes per load over conventional systems. {Indicate all savings on a per load basis compared to conventional or prior formulations. }

### Worker Safety

A neutral pH system, non-use of chlorine bleach, and automatic dispensing equipment afford laundry room attendants a safer and more efficient work environment.

### Fabric Savings

A non-chlorine system significantly reduces the generation of lint, thereby extending fabric life. (One study indicated . . . )

### Product Effectiveness

Include information on soil and stain removal, whiteness, and pathogen reduction.

### Customer Education

[Company name] acts as a product steward by sponsoring customer training sessions with information on environmental and worker safety matters. [Company name] also trains its sales force on the benefits of formulations with improved environmental and health characteristics.

[Company name] agrees to inform [product name] customers about the [company name]-EPA/DfE partnership and their role in helping to protect health and the environment. [Company name] will make available to its customers an EPA contact to whom questions or comments on the partnership may be directed.

## **8 EPA Recognition and Support**

[Company name] may use the Design for the Environment logo, DfE Industrial/Institutional Laundry Initiative logo, or any EPA statement of recognition or support on [product name] or [product name]-related information or advertising provided that EPA has had an opportunity to review and comment on the intended use. [Company name] may only use a DfE logo or EPA recognition for a DfE-recognized product and not on any general [company name] materials, non-DfE recognized products or literature, or non-[product name] advertising.

[Company name] will make available to EPA for review and comment any materials, including [product name] promotional letters and advertisements, that [company name] develops in connection with the EPA/DfE-[company name] partnership, and especially information that describes or characterizes the DfE Industrial and Institutional Laundry Initiative or EPA's position on issues related to the sector. [Company name] may request EPA assistance in reviewing and editing materials about [product name] and the partnership.

[Company name] may extend EPA/DfE recognition to [product name] customers. To help in this process, DfE will provide [company name] with a customer recognition letter and prototype certificate of recognition.

[Company name] must discontinue use of any Agency logo or other form of recognition, within 30 days, under the following circumstances: if [company name] stops formulating [product name] using ingredients with a more positive environmental profile; upon the termination of this MOU; or, if so notified by EPA.

EPA may disseminate non-confidential information about the partnership in various media, including fact sheets, presentations, and web site. EPA may issue a press release containing general information about the partnership and MOU.

## **9 Measures of Success**

[Company name] will provide to EPA, on a confidential basis, projected and actual market growth information for [product name]. [Company name] will make reasonable attempts to monitor the institutional laundry market and make available to the Agency information on the impact of [company name]'s [product name]. [Company name] will provide periodic updates to the EPA on customer acceptance and ease of use of the reformulated product.

At EPA's request, [company name] will make available to the Agency, on a confidential basis, formulation bills of materials that confirm that [product name] contains the ingredients agreed to in this MOU, or has been modified as provided by the MOU.

As discussed in section 5, [company name] will provide periodic updates to EPA on the continuous improvement component of its research and development activities and on its efforts to improve the environmental profile of [product name]'s ingredients. [Company name] will also share the results of any product performance testing.

## **10 Confidentiality**

EPA agrees to withhold from public disclosure and otherwise keep confidential all information claimed by [company name] as confidential business information in matters relating to this Design for the Environment partnership and MOU.

EPA/DfE will only use the information provided by [company name] for purposes related to the [company name]-EPA partnership/MOU and will disclose the information only to EPA employees and EPA contractors cleared for confidential information with a specific need to know. EPA/DfE will not disclose, publish, or otherwise reveal [company name]'s confidential information to any other party.

On [company name]'s request, EPA/DfE will return the company's confidential information. At [company name]'s option, EPA/DfE will destroy the company's confidential information in the Agency's possession. In any event, EPA/DfE will return or destroy [company name]'s confidential information when it is no longer needed for partnership activities.

[Company name] will maintain a copy of all confidential materials related to the [company name]-EPA/DfE partnership as records for the life of the partnership. On an as-needed basis, [company name] will provide the Agency copies of partnership records, including sanitized versions suitable for public disclosure.

## **11 Amendments to the MOU**

As discussed in the Continuous Environmental Improvement section of this MOU, [company name] may request that EPA/DfE add other products to this agreement. If EPA agrees to the addition, [company name] may amend this MOU by submitting a letter that contains the essential elements from sections 3, 4, 5 and 7 of the current MOU. [Company name] and EPA/DfE will collaborate in developing the specific language for the amendment, which must be signed by an appropriate [company name] official. All other provisions of this MOU shall be incorporated by reference.

## **12 Termination of the MOU**

If either [company name] or EPA has reason to believe that the other is not fulfilling the terms of the MOU, either party may take the following actions: provide written notification to the other stating a basis for the concern and providing a reasonable time to respond or remedy the situation. [Company name] and EPA should make reasonable efforts to resolve the issues to their mutual satisfaction. At its discretion, either party may



upon written notification terminate the MOU and its commitments will cease without further obligation.

In any event, the terms and obligations in this MOU will cease three years from the date of signature unless the parties renegotiate and renew a partnership agreement prior to the expiration date.

We agree to these terms and provisions:

For [company name]

For the U.S. Environmental  
Protection Agency

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[Company official]  
[Title]

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William H. Sanders, III  
Director, Office of Pollution  
Prevention and Toxics

Date \_\_\_\_\_

Date \_\_\_\_\_