

US EPA ARCHIVE DOCUMENT

DRAFT-05/25/01

4/6/01 DRAFT

Crompton Corporation

United States Environmental Protection Agency

State of Louisiana

The Crompton Taft Facility Clean Air Project

Project XL

Final Project Agreement

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US EPA ARCHIVE DOCUMENT

1.0 Introduction

1.1 Overview of Project

The U.S. Environmental Protection Agency (“EPA”), with the cooperation of State and local authorities, has initiated Project XL to work with interested companies and others to develop innovative approaches to environmental protection. Project XL encourages potential sponsors to come forward with new approaches that can advance our nation’s environmental goals more effectively and efficiently than current regulatory and policy tools or procedures.

The Crompton Taft Facility Clean Air Project XL (the “Project”) proposes to construct air emission control equipment at its Taft, Louisiana Plant (the “Taft Plant” or the “Plant”) that will reduce the Plant’s total actual volatile organic compound (“VOC”) and hazardous air pollutant (“HAP”) emissions.¹ Specifically, emission controls, described in greater detail below, will be placed on the Plant’s Tin Unit and Epoxy Unit. These emission controls are referred to herein as the Tin Unit Emission Reduction System (the “TUERS”) and the Epoxy Unit Emission Reduction System (the “EUERS”). In addition to the above mentioned air emission reductions, the Project will eliminate the generation and off-site disposal of approximately 48,000 pounds of hazardous waste per year.

The work proposed in this Project is not required by any current, proposed or anticipated law, rule or regulation. Moreover, Crompton does not currently plan to perform this work unless the Project is approved pursuant to the EPA’s XL Program.

Approximately \$2 million will be required to implement the Project. The cash necessary to make this investment will be derived from savings which would accrue from the relief Crompton is seeking from the final two years of a ten year marine monitoring program imposed by a 1989 Data Call In (the “DCI”) issued by EPA’s Office of Pollution Prevention and Toxic Substances (“OPPTS”).² As is discussed in greater detail below, data from the remaining years of the monitoring program are of limited value relative to the environmental benefit derived from the proposed Project. For these and other reasons, more fully described below, the Project satisfies all Project XL criteria.

1.2 The Crompton Taft Plant

¹ Permitted emissions will be used as a baseline from which to calculate the potential magnitude of these reductions. The actual emission reductions may vary significantly from year to year because emissions are directly proportional to by the Taft Plant’s volume of product sales.

² In the interests of facilitating this Project XL, Crompton and OPPTS have entered into a Memorandum of Agreement dated January 18, 2001 (the “MOA”) which is attached hereto as Appendix C. The MOA, the associated amendments to Crompton’s affected TBT registrations and State construction and operating permits for the TUERS and the EUERS will serve as the legally binding implementation mechanisms to ensure that the proposed air emission reduction systems are constructed and operated for the agreed upon term of years following execution of this FPA in exchange for the regulatory relief sought.

The Taft Plant is a chemical manufacturing facility located in St. Charles Parish, Louisiana. It is owned and operated by Crompton.³ Crompton, based in Greenwich, Connecticut, is a global producer and marketer of specialty chemicals, polymers and polymer processing equipment. Crompton's products are currently marketed in 120 countries and serve a wide variety of markets including but not limited to the automotive, agricultural, textile, plastics, lubricants, petrochemical, leather, construction, personal care, mining, paper, packaging, home furnishing, and appliance industries.

The Taft Plant covers about 45 acres in an industrial, sparsely populated area about 25 miles west of New Orleans. The area hosts numerous large petroleum refining, petrochemical and other chemical manufacturing facilities. A significant portion of the local population works in these facilities. The nearest residential areas are Hahnville and Kilona, which are approximately 2 miles to the east and west respectively of the plant. A map of the Taft Plant and the nearest residences is included in Appendix A.

The Taft Plant has four major operating units. These are referred to as the "Tin Unit," the "Thiochemical Unit," the "Epoxy Unit" and the "Mixed Metals Unit." These operating units manufacture a wide variety of products that are used in the production of vinyls, PVC plastics, dyes, photographic films and thousands of other industrial and consumer products. The facility is a minor air emission source with total permitted VOC emissions of 79 tons per year and total permitted HAP emissions of 24 tons per year. Actual emissions from the entire plant in 1999 were about 50 tons of VOCs and 13 tons of HAPs. Actual HAP emissions from the Tin Unit in 1999 were 6.51 tons. Actual VOC emissions from the Epoxy Unit in 1999 were about 15.2 tons. The area around the Taft Plant is presently in attainment for all criteria pollutants.

The Taft Plant has had an active Community Advisory Panel ("CAP") since 1991. The CAP participates in a range of issues and contributes to decisions about facility activities that are expected to have an impact on the community.

1.3 Purpose of the Final Project Agreement

This Final Project Agreement ("FPA") is a joint statement of the plans, intentions and commitments of EPA, the State of Louisiana and Crompton to carry out the Project approved for implementation at Crompton's Taft Plant. This Project will be part of EPA's Project XL program to develop innovative approaches to environmental protection.

This FPA sets forth the plans of the Project Signatories and represents the firm commitment of each Project Signatory to support the XL process, to implement the necessary regulatory flexibility in a timely fashion (subject to consideration of public comment) and to follow the terms of this FPA. This FPA does not create legal rights or obligations and is not an enforceable contract or a regulatory action such as a permit or rule. In addition, this FPA does not give anyone a right to sue the Project Signatories for any alleged failure to implement its terms, either to compel implementation or to recover damages.

³ Crompton was formed in a merger between Witco Corporation and Crompton & Knowles on September 1, 1999. Since it is the successor in interest to the Witco Corporation, in the interest of simplicity, Crompton is referenced throughout this document even in respect of events involving the Witco Corporation that pre-date September 1, 1999.

Federal and State flexibility and enforceable commitments described in this FPA are specified in and implemented by separate legal instruments. Specifically, Crompton has entered into a January 18, 2001 Memorandum of Agreement with the EPA (the “MOA”) and will be subject to requirements of construction and operating permits issued by the Louisiana Department of Environmental Quality (the “LDEQ”). The MOA, the associated amendments to Crompton’s affected TBT registrations and the LDEQ permits for the TUERS and EUERS shall serve as legally binding implementing mechanisms mandating that Crompton take certain specified actions to ensure Project completion. These legally binding implementing mechanisms are discussed in greater detail in Section 4.2 below. Nothing in this FPA is intended to modify, amend or alter in any way the terms or legal effect of the above described legally binding implementing mechanisms.

All parties to this FPA will strive for a high level of cooperation, communication, and coordination to assure successful, effective, and efficient implementation of the FPA and the Project.

This FPA and the materials relating to this Project are available on the Project XL Website at www.epa.gov/projectxl.

1.4 Signatories to the Agreement

This FPA is entered into, between and among the EPA, Crompton and the State of Louisiana. All those listed are referred to collectively as “Project Signatories.” The two regulatory agencies mentioned above are referred to collectively as “the regulatory authorities having jurisdiction over air emissions from the Crompton Taft Plant.”

1.5 Project Contacts

The contacts for the Project are:

<u>Participant</u>	<u>Contact</u>
Project Sponsor :	James A. Nortz Crompton Corporation One American Way Greenwich, CT 06831 203-552-2806 phone 203-552-2869 fax
USEPA Headquarters	Ted Cochin Office of Policy, Economics and Innovation MC 1802 U.S. Environmental Protection Agency Headquarters Ariel Rios Building 1200 Pennsylvania Avenue, N. W.

	Washington, DC 20460 202-260-0880 phone 202-401-6637 fax
USEPA Region 6	Adele Cardenas, Reinvention Coordinator United States Environmental Protection Agency Region 6 (6EN-XP) 1445 Ross Ave., Suite 1200 Dallas, TX 75202-2733 214-665-7210 phone 214-665-7446 fax
State of Louisiana	7290 Bluebonnet Blvd Baton Rouge, LA 70810 225-765-0647 phone 225-765-0746 fax

2.0 Project Description

2.1 Description of the Project

In exchange for relief from the remaining requirements of the DCI as set forth in the MOA, Crompton will undertake a construction project designed to reduce the Taft Plant’s actual total HAP and VOC emissions. The Project will also reduce the amount of hazardous waste sent off-site for disposal as well as the volume of non-hazardous waste that is currently disposed of through on-site deep well injection. The actual quantity of emission reductions will be dependent upon plant production levels and may vary significantly from year to year. However, the TUERS and EUERS will be designed, constructed and operated in a manner that would reduce HAP emissions by approximately 4 tons per year and VOC emissions by approximately 12 tons per year if the Plant were to run at its maximum permitted production rates.⁴ In such circumstances, the Project would also reduce hazardous waste by approximately 48,000 pounds per year.⁵

Neither the emission nor the waste reductions anticipated by implementation of this Project are currently mandated by law, regulation or permit. In addition, Project Signatories are not aware of any anticipated regulatory mandates that would require such reductions in the future.

⁴The emission reduction estimates presented herein are based on a very preliminary engineering analysis of the likely performance of the TUERS and the EUERS which have yet to undergo detailed engineering design. Although it is Crompton’s intention to construct a TUERS and EUERS that will achieve the stated emission reductions, given the complexity of these systems and their interaction with the Tin and Epoxy Units, actual TUERS and EUERS performance may vary somewhat from these preliminary estimates.

⁵ It is important to note that unit production volumes and their corresponding air emissions and waste production vary on an annual basis depending upon customer demand for products manufactured at the Taft Plant. Consequently, actual emission and waste reductions achieved by the TUERS or EUERS will be directly proportional to unit production rates.

The specific Project elements are described in greater detail below. Descriptions of the Project elements herein are intended to be consistent with those specified in the MOA. In the event of any discrepancy or inconsistency between this FPA and the MOA or the associated amendments to Crompton's affected TBT registrations, the terms of the MOA and registration amendments shall govern.

2.2 Elements of the Agreement

2.2.1 Modifications to the Tin and Epoxy Units to facilitate emission reductions

Crompton intends to achieve the proposed HAP, VOC and waste emission reductions by making certain modifications to its Tin and Epoxy Units. Although detailed design work has yet to be performed, the following is a general description of the process unit design modifications and control technologies that Crompton intends to make and install.

Tin Unit Modifications:

Crompton will purchase and install air emission control equipment (the "TUERS") in its Tin Unit for the purpose of reducing current HAP emissions. The HAPs include methychloride, hexane and toluene. The project will entail the design and installation of an innovative system to safely collect and deliver several current HAP emission streams to a thermal oxidizer. Specifications for the thermal oxidizer and other equipment will be developed during the design phase of the Project and necessary equipment will be obtained from outside equipment manufacturers. These modifications will achieve virtually all of the HAP's emission reductions anticipated in the Project. Operation of a thermal oxidizer to reduce the above-mentioned HAP emissions will result in a slight increase in the plant's NOx emissions. The precise quantity of this increase will depend upon the size of the thermal oxidizer and the temperatures that must be maintained to achieve the desired HAP destruction efficiencies. These parameters will be determined during the design process.

Epoxy Unit Modifications:

Crompton will install air emission control equipment (the "EUERS") in its Epoxy Unit for the purpose of reducing current VOC emissions. The principal elements of the EUERS will be a hydrocarbon separation and heptane collection and decanting system. Both technologies will reduce Epoxy Unit VOC emissions by capturing VOCs that are currently emitted to the atmosphere and returning them to back into the Epoxy production Unit. Specifications for the EUERS will be developed during the design phase of the Project and necessary equipment will be obtained from outside equipment manufacturers.

The design and installation of the control technologies and process modifications for both the Tin and Epoxy Units described above will require a permit to construct and operate issued by the State of Louisiana pursuant to Louisiana Administrative Code, Title 33: III. §511 and §501.C.2. Crompton will apply for and obtain the permit from the State of Louisiana and will obtain all other necessary local government approvals. After Crompton receives all necessary government approvals, it will commence construction and installation of the TUERS and EUERS. Mechanical construction of the TUERS and EUERS will be completed when all components necessary for its operation (including but not limited to power, monitoring and instrumentation units) are installed and functional. After completing mechanical

construction of the TUERS and EUERS, and in accordance with the permit and operational procedures developed in the course of the design and construction of the two Systems, Crompton will start up and operate the Systems.

2.2.2 Term of Operation

Crompton will operate designated emission control units at specified efficiencies in accordance with unit operating permits for at least the Term of this FPA which is 5 years from date the FPA is executed by EPA Region 6.

2.2.3 Monitoring, Reporting, Accountability, and Evaluation

Crompton will issue quarterly Project status reports to all Project Signatories and the Taft Plant's local Community Advisory Panel ("CAP") chronicling progress toward implementation of the Project. Crompton will also make the reports available on its Website and in other media pursuant to its Stakeholder Participation Plan attached hereto as Appendix G. These periodic status reports will track project commitments, measure environmental performance, stakeholder involvement, cost and cost savings with respect to the Project.

3.0 Compliance with the Project XL Criteria

The Project will clearly meet or exceed all Project XL criteria. The Project's satisfaction of each criterion is described in detail below.

3.1 Superior Environmental Performance

Proposed XL projects must demonstrate environmental performance that is superior to what would be achieved through compliance with current and reasonably anticipated future regulatory requirements. Each of the proposed elements of the Project independently satisfies this fundamental Project XL criterion.

The Project will reduce the Taft Plant's total HAP and VOC emissions and hazardous and non-hazardous waste production through the installation of new emission control technologies and innovative design modifications at the Taft Facility's Tin and Epoxy Units. These emission and waste generation improvements will occur in an area less than 25 miles west of New Orleans, and one that has been heavily impacted from and dominated by heavy industrial development, including numerous chemical, petroleum, and power-generation facilities. Thus, the Project represents a voluntary commitment on the part of Crompton to go above and beyond currently required practices and the environmental performance criteria specified by the current regulatory system in a manner which clearly satisfies the XL requirement for Superior Environmental Performance.

3.2 Benefits to the Applicant

The Project's modifications at the Epoxy Unit, which will recirculate VOCs and other wastes back into the Epoxy Unit's production process, will result in reduced raw material and hazardous waste disposal costs. The Project's modifications of the Tin Unit will effectively increase the production capacity of the plant by allowing it to produce a greater volume of products with lower overall HAP emissions. In addition, suspension of the DCI monitoring program will produce immediate, direct and significant paperwork savings.

These benefits satisfy the XL requirements for applicant benefits.

3.3 Stakeholder Involvement and Support

The Project has involved numerous stakeholders, including a CAP and local and state governments. Project information has been provided to local publications and, through the Project XL Website and Crompton's Website, to the nation and the world.

The following describe the key elements of the Stakeholder Program and how it satisfies XL requirements.

- The Taft Plant has reviewed the elements of the Project with its local CAP and has received the advisory panel's full support. The letter of endorsement is attached as Appendix B.
- The Taft Plant has had articles published in the St. Charles Herald and the Times Picayune describing the Project.
- Both Crompton and EPA have included Project information on their respective Websites. These websites will document all milestones including any reporting activities necessary to implement this project as agreed to in both the MOA and this FPA.
- EPA has placed Project information on the Project XL Website.
- Crompton will work with the State of Louisiana to provide all notices required in the permitting process.
- Crompton's Stakeholder Participation Plan attached hereto as Appendix G.

These actions satisfy the XL stakeholder involvement criteria.

3.4 Innovative Approaches and Pollution Prevention

Each element of the Project independently satisfies this criterion. The Project will reduce the Taft plant's total HAP and VOC emissions through the installation of new control technologies and innovative

design modifications. The design modifications will also reduce the generation of hazardous and non-hazardous wastes by capturing and returning these materials to the original production process. As a result, the Project will demonstrate the practical implementation of source reduction and reuse technologies in the production process and the cost savings that can be achieved through the use of innovative but practical design modifications.

3.5 Transferability

Each element of this Project independently satisfies this criterion. Modifications to be made at the Taft Plant to achieve pollution prevention and reduction are expected and intended to be useable at other facilities.

3.6 Project Feasibility

Crompton believes the Project is feasible. Crompton has the resources necessary to carry it out.

3.7 Monitoring, Reporting, Accountability and Evaluation Methods

Stakeholders, Agencies and the public will observe the Project as it moves forward. In addition, the reporting program identified in Section 2.2.4 will provide a further mechanism to ensure Project accountability necessary to fulfill this criterion.

3.8 Avoidance of Shifting of Risk Burden

This Project is consistent with Executive Order 12898 on Environmental Justice. No neighborhood or group of citizens will be subject to new, additional or disproportionate impacts resulting from the implementation of this Project.

4.0 Description of Requested Flexibility

4.1 Background and Requested Flexibilities

Crompton has been for many years a producer of tributyltin compounds (“TBT”)⁶ used in antifouling marine paints. TBT based paints were first used in the 1970’s to assist in keeping ship hulls free of marine organisms. TBT acts both as a biocide and as an agent that imparts a “self-polishing” quality to marine paints.

In the 1980’s, regulatory organizations in the United States and around the world became concerned about levels of TBT being found in the marine environment, especially in the vicinity of

⁶ As used herein, the term “TBT” refers to a variety of compounds which include bis(tributyltin) oxide and tributyltin methacrylate and the corresponding acrylic and/or methacrylic copolymers).

shipyards and marinas. In response to these concerns, in 1988, Congress passed and the President signed into law the Organotin Antifouling Paint Control Act of 1988 (“OAPCA”).⁷ OAPCA, and the state and federal regulations or regulatory actions that followed its passage, were intended to reduce the amount of TBT loading to the environment while at the same time permitting the continued use of TBT based paints on large ocean going vessels. OAPCA required sampling of the water column, tissues of marine organisms and sediments to determine whether the OAPCA-mandated regulatory restrictions actually resulted in reduced TBT concentrations in the marine environment. OAPCA at §§ 7(a), (c), (e) and 8(b).

In 1989, EPA issued a data call-in (the “DCI”)⁸ to Crompton and others registrants pursuant to its authority under the Federal, Insecticide, Fungicide and Rodenticide Act, 7 U.S.C.A. §§ 136-136y, (“FIFRA”).⁹ The stated purpose of the DCI was to “measure the adequacy of the current regulatory action to protect non-target organisms by reducing the existing levels of tributyltin residues.” DCI at p. 3. It required TBT registrants, including Crompton to monitor for ten years, TBT concentrations in the water column, sediments and the tissues of marine organisms at certain specified areas in the Great Lakes and near-coastal waterways of the United States.

Eight years of data have been produced pursuant to the DCI. These data indicate that there has been a general downward trend in TBT concentrations in the marine environment. The data are consistent with data gathered by the U.S. Navy, the National Oceanic and Atmospheric Administration, the National Status and Trends Mussel Watch, and other researchers both in the United States and around the world. EPA reviews of the DCI data have concluded that TBT levels, while dropping, still exceed levels of concern, and furthermore, future data from the monitoring program are likely to be of limited utility. Consequently, the Project Signatories agree that Crompton can achieve superior environmental performance by redirecting the funds now planned to be used to complete the remaining two years of the DCI to enhance air quality control at Crompton’s Taft Plant.

EPA, with the cooperation of State and local authorities, has initiated Project XL to work with interested companies or other potential project sponsors to develop innovative approaches to environmental protection. Project XL encourages potential sponsors to come forward with new approaches that can advance our nation’s environmental goals more effectively and efficiently than current regulatory and policy tools or procedures.

The current Project scope is premised upon projected savings to Crompton, which would result from relief from the remaining DCI requirements. These savings will be used to implement the Project that is voluntary and not otherwise budgeted by Crompton.

4.2 Legally Binding Implementing Mechanisms

⁷ A copy of OAPCA is attached as Appendix D.

⁸ A copy of the 1989 DCI is attached as Appendix E.

⁹ The 1989 DCI has been amended several times since its initial issuance. The current monitoring protocol and the DCI amendments are attached as Appendix F.

This Project relies on three Legally Binding Implementation Mechanisms. The first is the MOA that mandates an amendment of Crompton's affected TBT registrations in exchange, in part, for Crompton's participation in this Project. The second is the amendment to Crompton's affected TBT registrations mandated by the MOA. The third, Legally Binding Implementation Mechanism will be state construction permits for the TUERS and the EUERS, which under Louisiana law, will regulate both the construction and operation of the proposed air emission control technologies.

The MOA and the associated amendments to Crompton's affected TBT registrations require that Crompton design, permit, construct and initiate operations of the TUERS and the EUERS by the deadlines specified in Section 5.4 below. See Appendix C. TUERS. The LDEQ construction and operating permits will be issued following Crompton's submission of a suitable permit application in accordance with the schedule specified in Section 5.4 below. Crompton's failure to comply fully with any of these Legally Binding Implementing Mechanisms may result in enforcement actions by either the EPA or the LDEQ.

5.0 Intentions and Commitments for Project Implementation

5.1 Crompton, Inc. Intentions and Commitments

As discussed more fully elsewhere in this FPA, Crompton will:

- Design, construct and operate the TUERS and the EUERS at its Taft Plant in a manner necessary to reduce the plant's total HAP and VOC emissions and to reduce hazardous and non-hazardous waste generation;
- Meet the Schedule and Milestones set forth in Section 5.4 of this FPA;
- Provide the necessary reports and monitoring information as provided in Section 2.2.4;
- Comply with the obligations and requirements set forth in the MOA; and
- Implement the Stakeholder Participation Plan attached hereto as Appendix G.

5.2 Intentions and Commitments by Government Agencies

5.2.1 US Environmental Protection Agency

As discussed more fully in this FPA, EPA will:

- Undertake its agreed upon actions under the MOA; and
- Participate in good faith with Crompton in the implementation of this FPA.

5.2.2 State of Louisiana

As discussed more fully in this FPA, the Louisiana Department of Environmental Quality will:

- Issue the necessary permits for the Taft Plant improvements consistent with Louisiana statutes and regulations following receipt of administratively complete, accurate and acceptable permit applications; and
- Participate in good faith with Crompton in the implementation of this FPA.

5.3 Project XL Performance Targets

The Taft HAP and VOC emission reductions will produce immediate and measurable environmental benefits. Specifically, the Project will be designed to achieve a reduction of approximately 4 tons per year HAP’s and 12 tons per year VOC’s when the Tin and Epoxy Units are operated at maximum permitted production rates. In addition, Crompton anticipates that at maximum permitted production rates hazardous waste production will be reduced by approximately 48,000 pounds per year. The actual quantity of emission reductions achieved in any one year is dependent upon production volumes that can vary substantially from year to year. The emission reductions that will be achieved by the installation and operation of the TUERS and EUERS are not required by any current or reasonably anticipated local, state or federal regulation.

5.4 Proposed Schedule and Milestones

Crompton agrees to the critical path and milestones described below for the implementation of this Project. In the event that any milestone is not completed by the date set, the Project Signatories agree to meet and determine whether an alternative deadline is mutually acceptable. Any such alternative shall be incorporated as a term in this FPA.

Milestone	Deadline
1. Commence design	Thirty (30) days from effective date of FPA
2. Apply for construction permits and approvals	One hundred eighty (180) days from effective date of FPA
3. Commencement of construction	Ninety (90) days after receipt of all necessary permits and approvals

4. Complete construction	Three hundred (300) days after receipt of all necessary permits and approvals
5. Begin operations	Three hundred sixty-five (365) days after receipt of all necessary permits and approvals

5.5 Periodic Review by the Parties to the Agreement

The Project Signatories will hold performance review conferences:

- Upon the startup of the TUERS and the EUERS;
- At the halfway point in the life of this FPA, which will be 2.5 years; and
- At any other time and place mutually agreed upon by the Parties to this FPA.

No later than thirty (30) days following a performance review conference, Crompton will provide a summary of the minutes of that conference to the Project Signatories and to the Taft Plant CAP. Any additional comments of participating Stakeholders will be reported to EPA. Crompton will also submit quarterly progress reports to EPA’s Office of Pesticide Programs until four quarters following the satisfaction of the Terms and Conditions set forth in the MOA.

5.6 Term of the FPA

This FPA will remain in effect for 5 years, (the “Project Term”) unless the Project ends at an earlier date, as provided under Section 8 (Amendments or Modifications) or Section 10 (Withdrawal or Termination) This Project will not extend past the agreed upon date and Crompton will comply with all applicable requirements following this date (as described in Section 11), unless all parties agree to an amendment to the Project Term (as provided in Section 8).

6.0 Legal Basis for the Project

6.1 Authority to Enter into an Agreement

By signing this FPA, EPA, the State of Louisiana and Crompton acknowledge and agree that they have the respective authorities, discretion, and resources to enter into this FPA and to implement all applicable provisions of this Project.

6.2 Legal Effect of the Agreement

This FPA states the intentions of the Project Signatories with respect to the Project. The Project Signatories have stated their intentions seriously and in good faith, and expect to carry out their stated intentions.

This FPA in itself does not create or modify legal rights or obligations, is not a contract or a regulatory action, such as a permit or a rule, and is not legally binding or enforceable against any Project Signatory. Rather, it expresses the plans and intentions of the Project Signatories without making those plans and intentions binding requirements. This applies to the provisions of this FPA that concern procedural as well as substantive matters. Thus, for example, the FPA establishes that the procedures Project Signatories intend to follow with respect to dispute resolution and termination (*see* Sections 9 and 10). However, while the Project Signatories fully intend to adhere to these procedures, they are not legally obligated to do so.

Any rules, permit modifications or legal mechanisms that implement this Project will be effective and enforceable as provided under applicable law.

This FPA is not a “final agency action.” It does not create or modify legal rights or obligations and is not legally enforceable. This FPA itself is not subject to judicial review or enforcement. Deviation or alleged deviation from a provision of this FPA will not serve as the basis for any claim for damages, compensation or other relief against any Party.

6.3 Retention of Rights to Other Legal Remedies

Nothing in this FPA affects or limits Crompton’s, EPA’s or the State of Louisiana’s legal rights. These rights may include legal, equitable, civil, criminal or administrative claims or other relief regarding the enforcement of present or future applicable federal and state laws, rules, regulations, conditions of registration in the listing or permits with respect to the facility.

Although Crompton does not intend to challenge agency actions implementing the Project (including any rule amendments or adoptions, permit actions, conditions of registration or other action) that are consistent with this FPA, Crompton reserves its rights to appeal or otherwise challenge any EPA or State of Louisiana action to implement the Project. Nothing in this FPA is intended to limit Crompton’s right of administrative or judicial appeal or review of those legal mechanisms in accordance with the applicable procedures for such review.

7.0 Unavoidable Delay During Project Implementation

Crompton shall be excused for any delay in Project implementation in accordance with the terms and conditions of the MOA, the associated amendments to Crompton’s affected TBT registrations and/or the permits issued by the LDEQ for the construction and operation of the TUERS and the EUERS as applicable in the circumstances.

When any event occurs that may delay or prevent the implementation of this Project, whether or not it is avoidable, the Project Signatory to this FPA who knows about it will immediately provide notice to the remaining Project Signatories. Within ten (10) days after that initial notice, the Project Signatory should confirm the event in writing. The confirming notice should include: 1) the reason for the delay; 2) the anticipated duration; 3) all actions taken to prevent or minimize the delay; and 4) why the delay was considered unavoidable, accompanied by appropriate documentation.

If the Project Signatories agree relevant parts of the Project Schedule and Milestones (Section 5.4) will be extended through a written amendment to this FPA to cover the time period lost due to the delay. If the Project Signatories do not agree, then they will follow the provisions for Dispute Resolution outlined below.

8.0 Amendments or Modifications to the Agreement

This Project is an experiment designed to test new approaches to environmental protection. There is a degree of uncertainty regarding the environmental benefits and costs associated with activities to be undertaken in this Project. Therefore, it may be appropriate to amend this FPA at some point during its duration.

This FPA may be amended by mutual agreement of all Project Signatories at any time during the duration of the Project. However, no amendment will be made to this FPA that would preclude, prevent or delay Crompton's compliance with the requirements of the MOA, the associated amendments of Crompton's affected TBT registrations or permits issued by the LDEQ for the construction and operation of the TUERS and the EUERS. If the FPA is amended, the Project Signatories expect to work together to identify and pursue any necessary modifications or additions in accordance with applicable procedures. Should the FPA be substantially amended, the general public will receive notice of the amendment and be given an opportunity to participate in the process, as appropriate.

In determining whether to amend the FPA, the Project Signatories will evaluate whether the proposed amendment meets Project XL acceptance criteria and any other relevant considerations agreed on by the Project Signatories. All Project Signatories to the FPA will meet within ninety (90) days following submission of any proposed amendments (or within a shorter or longer period if all Project Signatories agree) to discuss evaluation of the proposed amendment. If all Project Signatories support the proposed amendment, they will (after appropriate stakeholder involvement) amend the FPA.

9.0 Process for Resolving Disputes

Any dispute, which arises under or with respect to the FPA, will be subject to informal negotiations between the Project Signatories to the FPA. The period of informal negotiations will not exceed twenty (20) calendar days from the time the dispute is first documented, unless that period is extended by a written agreement of the parties to the dispute. The dispute will be considered documented when one party sends a written Notice of Dispute to the other Project Signatories.

If the Project Signatories cannot resolve a dispute through informal negotiations, they may invoke non-binding mediation by describing the dispute with a proposal for solution in a letter to the Regional Administrator for EPA Region 6. The Regional Administrator will serve as the non-binding mediator and may request an informal mediation meeting to attempt to resolve the dispute. He or she will then issue a written opinion that will be non-binding and does not constitute a final EPA action. If this effort is not successful, the Project Signatories will have the option to terminate or withdraw from the FPA, as set forth in Section 11 below.

10.0 Withdrawal or Termination of the Agreement

10.1 Expectations

Although this FPA is not legally binding and any Project Signatory may withdraw from the FPA at any time, it is the expectation and desire of the Project Signatories that it should remain in effect through the Project Term of 5 years, and be implemented as fully as possible unless one of the conditions below occurs:

A. Failure by any Project Signatory to comply with the provisions of the Legally Binding Implementing Mechanisms (Section 4.2) for this Project; or act in accordance with the provisions of this FPA. The assessment of the failure will take its nature and duration into account.

B. Failure of any Project Signatory to disclose material facts during development of the FPA.

C. Failure of the Project to provide superior environmental performance consistent with the provisions of this Agreement.

D. Enactment or promulgation of any environmental, health or safety law or regulation that renders the Project legally, technically or economically impracticable.

EPA and Louisiana do not intend to withdraw from the FPA if Crompton does not act in accordance with this FPA or its implementation mechanisms, unless the actions constitute a substantial failure to act consistently with intentions expressed in this FPA and its implementing mechanisms. The decision to withdraw will, of course, take the failure's nature and duration into account.

Crompton will be given notice and a reasonable opportunity to remedy any "substantial failure" in accordance with this FPA and the terms and conditions of the MOA, the associated amendments to Crompton's affected TBT registrations and/or permits issued by the LDEQ for the construction and operation of the TUERS and the EUERS as may be applicable in the circumstances. If there is a disagreement between the Project Signatories over whether a "substantial failure" exists, the Project Signatories will use the dispute resolution mechanism identified in Section 9 of this FPA. EPA and the State of Louisiana retain their discretion to use existing enforcement authorities, including withdrawal or termination of this Project, as appropriate. Crompton retains any existing rights to defend itself in any enforcement action.

10.2 Procedures

The Project Signatories agree that the following procedures will be used to withdraw from or terminate the Project before expiration of the Project Term.

1. Any Project Signatory that wishes to terminate or withdraw from the Project is expected to provide written notice to the other Signatories at least sixty (60) days before the withdrawal or termination.

2. If requested by any Project Signatory during the sixty (60) day period noted above, the dispute resolution proceedings described in this FPA may be initiated to resolve any dispute relating to the intended withdrawal or termination. If, following any dispute resolution or informal discussion, a Project Signatory still desires to withdraw or terminate, that Project Signatory will provide written notice of final withdrawal or termination to the other Project Signatories.

If any regulatory authority having jurisdiction over air emissions from the Crompton Taft Plant withdraws or terminates its participation in the FPA, the remaining Project Signatory will consult with Crompton to determine whether the FPA should be continued in a modified form, consistent with applicable federal or state law, or whether it should be terminated.

3. The procedures described in this Section apply only to the decision to withdraw from or terminate participation in this FPA. Procedures to be used in modifying or rescinding any Legally Binding Implementing Mechanisms will be governed by the terms of those legal mechanisms and applicable law.

11.0 Actions After Project End

The Project Signatories intend the following procedures to govern upon the completion, withdrawal from, or termination of the Project.

11.1 Actions if the Project Term is Completed and Not Extended

Following completion of the Project Term, the Taft Plant shall have the option to seek amendment(s) to the air permit(s) for the Tin and Epoxy Units that allow it to return to the terms and/or emission limits in effect prior to the effective date of this FPA. Crompton may request a meeting with EPA or the State of Louisiana to discuss the timing and nature of any amendments it is seeking. The Project Signatories should meet within thirty (30) days of receipt of Crompton's written request for such a meeting.

11.2 Actions in the Event of Early Withdrawal or Termination

a. At all times prior to Crompton's compliance with the MOA's Terms and Conditions, Crompton's rights and obligations in respect of Crompton's withdrawal from or termination of this

Project shall be governed by the MOA and the resulting amendment to Crompton’s affected TBT Registrations.

b. At all times following Crompton’s compliance with the MOA’s Terms and Conditions, and prior to the end of this Project’s Term, Crompton’s rights and obligations in respected of its withdrawal from or termination of this Project shall be governed by the terms and conditions of the operating and construction permits for TUERS and the EUERS.

c. In the event that prior to the end of the Project Term a (i) Project Signatory other than Crompton withdraws from, or terminates the Project for reasons not related to Crompton’s performance of the Project; or (ii) a law or regulation renders the Project legally, technically or economically impracticable, Crompton shall have the right to (x) petition the EPA for complete or partial relief from its obligations specified in the MOA’s Terms and Conditions and the associated amendments to its affected TBT registrations; and (y) seek amendment(s) to the air permit(s) for the Tin and Epoxy Units that allow Crompton’s Taft Plant to return to the terms and/or emission limits in effect prior to the effective date of this FPA. Relief sought by Crompton pursuant to this Section 11.2(c) shall not be unreasonably denied.

12.0 Signatories and Effective Date

This FPA is effective on the date it is signed by EPA’s Regional Administrator for Region 6.

Gregg Cooke, Regional Administrator, U.S. EPA Region 6

Date Signed

[Name], State of Louisiana

Date Signed

Crompton Corporation

Date Signed

US EPA ARCHIVE DOCUMENT

Appendix A: Map of St. Charles Parish Identifying the Taft Plant

Appendix B: Letter of Endorsement from the Taft Plant CAP

Appendix C: January 18, 2001 Memorandum of Agreement and Registration Amendment

Appendix D: Organotin Antifouling Paint Control Act

Appendix E: 1989 DCI

Appendix F: Current Monitoring Protocol and DCI Amendments

Appendix G: Stakeholder Participation Plan