IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ROME DIVISION

UNITED STATES OF AMERICA,	
Plaintiff,	Civ. No.
v.	
MFG CHEMICAL, LLC,	
Defendant.	

CONSENT DECREE

A. Plaintiff United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), has filed a Complaint in this action concurrently with this Consent Decree, alleging that Defendant MFG Chemical, LLC ("Defendant") violated the General Duty Clause ("GDC") of Section 112(r)(1) of the Clean Air Act ("CAA"), 42 U.S.C.§ 7412(r)(1), at Defendant's chemical manufacturing and processing facility located at 117 Callahan Road SE, Dalton, Georgia ("the Callahan Facility"), resulting in a chemical explosion on May 21, 2012.

B. The Complaint alleges that Defendant was producing, processing, handling, or storing certain chemicals at the Callahan Facility, including Hydrogen Peroxide, Maleic Anhydride, Epoxysuccinic Acid, and Coagulant 129, of which one or more are extremely hazardous substances for purposes of the CAA. The Complaint further alleges that Defendant violated the GDC by failing to: (1) identify hazards which may result from the accidental release of an extremely hazardous substance using appropriate hazard assessment techniques; (2) design and maintain a safe facility taking such steps as are necessary to prevent the release of an extremely hazardous substance; and/or (3) minimize the consequences of releases that occur.

C. By entering into this Consent Decree, Defendant makes no admission of law or fact with respect to any of the allegations contained in the Complaint filed herewith.

D. The parties to this Consent Decree agree, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the parties in good faith and will avoid unnecessary litigation, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, with the consent of the parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113 of the CAA, 42 U.S.C. § 7413, and over the parties. Venue is proper in this District under Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because the Defendant's principal place of business is in, and the facts giving rise to this action arose within, this judicial district.

2. Defendant acknowledges and consents to the Court's jurisdiction over this action and to the Court's continuing jurisdiction to enforce this Consent Decree. Defendant consents to venue in this judicial district. Defendant consents to

entry of this Consent Decree and agrees not to challenge the validity of this Consent Decree or entry of this Consent Decree by the Court.

II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States and upon Defendant and its officers, directors, agents, trustees, servants, employees, successors, and assigns or persons otherwise bound by law.

4. No transfer of ownership or operation of the Callahan Facility or the other Facilities, whether in compliance with the procedures of this Paragraph or otherwise, will relieve Defendant of its obligation to ensure that the terms of the Consent Decree are implemented. At least 30 Days prior to any such transfer, Defendant shall simultaneously: (i) provide a copy of this Consent Decree to the proposed transferee; and (ii) provide written notice of the prospective transfer and a copy of the proposed written transfer agreement to the United States, in accordance with Section XIV of this Consent Decree (Notices). Any attempt to transfer ownership or operation of any such Facility without complying with this Paragraph constitutes a violation of this Decree.

5. Defendant shall provide a copy of this Consent Decree to: (i) all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree; and (ii) any contractor retained to perform work required under this Consent Decree. Defendant shall condition any such contract

upon performance of the work in conformity with the terms of this Consent Decree.

6. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. DEFINITIONS

7. Terms used in this Consent Decree that are defined in the CAA or in regulations promulgated pursuant to the CAA have the meanings assigned to them in the CAA or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions apply:

a. "Calendar-Quarter" means any three-month period ending on March 31, June 30, September 30, or December 31 of each calendar year;

b. "Complaint" means the complaint filed by the United States in this action;

c. "Consent Decree" or "Decree" means this Consent Decree and all appendices attached hereto;

d. "Day" means a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where

the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

e. "Defendant" and "MFG" means MFG Chemical, LLC and its predecessor company, MFG Chemical, Inc.;

f. "EPA" means the United States Environmental Protection Agency and any of its successor departments or agencies;

g. "Effective Date" is defined in Section XV of this Consent Decree;

h. "Facilities" shall mean, collectively, the chemical production facilities that are owned and operated by the Defendant located at 1200 Brooks Road ("Brooks Facility"), 1804 Kimberly Park Drive ("Kimberly Park Facility") and 117 Callahan Road ("Callahan Facility") in Dalton, Georgia. Each of the Facilities shall be referred to herein as a "Facility";

i. "Month," when computing any period of time under this Consent Decree, means the period between and including a date in the starting month (e.g., January 12) and the day before that date in the next calendar month (e.g., February 11);

j. "Paragraph" means a portion of this Decree identified by an Arabic numeral;

k. "Parties" means Plaintiff United States of America and Defendant;

l. "Section" means a portion of this Decree identified by a Roman numeral;

m. "United States" means the United States of America, acting on behalf of EPA; and

n. "Year," when computing any period of time under this Consent Decree that does not begin on January 1, means the period between and including a date in the starting month (e.g., January 2, 2000) and the day before that date in the next calendar year (e.g., January 1, 2001). When computing a period of time that begins on January 1, "Year" means January 1 through December 31 of the same year.

IV. CIVIL PENALTY

8. Within thirty (30) Days after the Effective Date Defendant shall pay to the United States the sum of $400,000.00 as a civil penalty, together with interest accruing from the date on which this Consent Decree is lodged with the Court at the rate specified in 28 U.S.0 § 1961 as of the date of lodging.

9. The civil penalty to be paid to the United States pursuant to the previous paragraph shall be made by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be

provided to Defendant by the Financial Litigation Unit ("FLU") of the U.S. Attorney's Office for the Northern District of Georgia, 600 Richard B. Russell Federal Building, 75 Spring Street, S.W., Atlanta, GA 30303-3309, phone no. (404) 581-6000, following lodging of the Consent Decree. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which Defendant shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Keith Arnold, President & CEO
MFG Chemical, LLC
1804 Kimberly Park Drive
Dalton, GA 30720
Phone: 706-226-4114
Email: karnold@mfgchemical.com

on behalf of Defendant. Defendant may change the individual to receive payment instructions on its behalf by providing written notice of such change to the United States and EPA in accordance with Section XIV (Notices).

10. At the time of payment, Defendant shall send notice that payment has been made: (i) to EPA via email at cinwd_acctsreceivable@epa.gov or via regular mail to EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; and (ii) to the United States via email or regular mail in accordance with Section XIV (Notices). Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in United States v. MFG

Chemical, LLC, and shall reference the civil action number, CDCS number, and DOJ case number 90-5-2-1-08683/1.

11. Defendant shall not deduct any penalties paid under this Consent Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal income tax.

V. COMPLIANCE REQUIREMENTS

12. Defendant shall at all times comply with Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), with respect to the Facilities by identifying hazards that may result from accidental releases of any extremely hazardous substances as defined by Section 112(r)(1) of the CAA using appropriate hazard assessment techniques; designing and maintaining safe facilities in order to prevent such releases; and minimizing the consequences of any such accidental releases that do occur.

13. Defendant shall comply with and implement all provisions in Appendix A hereto, consistent with and using Recognized and Generally Accepted Good Engineering Practices (RAGAGEP) as defined in Appendix A, including, but not limited to, industry standards, codes, and practices, in accordance with the schedules identified in Appendix A and this Consent Decree, and shall comply with all other requirements set forth in this Consent Decree.

VI. PERMITS

14. Where any compliance obligation under this Consent Decree requires Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. If Defendant has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals, Defendant may seek relief under the provisions of Section IX of this Consent Decree (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation.

VII. REPORTING REQUIREMENTS

15. Defendant shall timely submit to the United States all reports, schedules, protocols, and notifications described in Appendix A.

16. Whenever any violation of this Consent Decree or any other event affecting Defendant's performance under this Decree may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA and the state(s) impacted by the violation or event, orally or by electronic or facsimile transmission, as soon as possible, but no later than 24 hours after Defendant first becomes aware of the violation or event. This procedure is in addition to the reporting requirements set forth in Appendix A.

17. Nothing in the preceding Paragraph relieves Defendant of its obligation to provide the notice required by Section IX of this Consent Decree (Force Majeure).

18. Defendant shall submit all reports, schedules, protocols, and notifications to the persons designated in Section XIV of this Consent Decree (Notices).

19. Each report, schedule, protocol, or notification submitted under this Section shall be signed by an official of the submitting party, and shall include the following certification:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency notifications pursuant to Paragraph 16 above. Additional certification requirements for both MFG and the Engineering Firm as defined in Appendix A are outlined in Section III(G) and IV(E) of Appendix A.

20. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the CAA or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

21. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

VIII. STIPULATED PENALTIES

22. Defendant shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below in Table 1, unless excused under Section IX (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

Table 1

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as required under Section IV (Civil Penalty) of this Consent Decree.	$2,000 per Day for each Day the payment is late.

Violation	Number of Days Late or Deficient	Penalty Per day
b. Failure to timely hire a qualified Engineering Firm as specified in Appendix A, Section II.	1-30 31-59 60 and over	$1,000 $3,000 $5,000
c. Failure to timely conduct a hazard assessment in conformity with all specifications and requirements set forth in Appendix A, Section III.A-F.	1-30 31-59 60 and over	$1,500 $3,000 $6,500
d. Failure to timely complete implementation of all corrective actions as specified in Appendix A, Section IV.	1-30 31-59 60 and over	$1,500 $3,000 $6,000
e. Each failure to timely submit to EPA reports, statements, protocols, schedules, and notifications as required under Section VII of this Consent Decree and Appendix A.	1-30 31-59 60 and over	$500 $1,000 $1,500
f. Failure to comply with any requirement of this Consent Decree not specifically set forth above.	1-30 31-59 60 and over	$500 $1,000 $1,500

23. Stipulated penalties under this Section begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable,

and continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties will accrue simultaneously for separate violations of this Consent Decree.

24. Defendant shall pay any stipulated penalty within thirty (30) Days of receiving the United States' written demand.

25. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due under this Consent Decree.

26. Stipulated penalties continue to accrue, as provided in Paragraph 23, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owed, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant shall pay all accrued penalties that the Court determines that Defendant owes, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.

c. If any Party appeals the Court's decision, Defendant shall pay all accrued penalties determined to be owed, together with interest, within 15 Days of receiving the final appellate court decision.

27. Defendant shall pay stipulated penalties owed to the United States in the manner set forth and with the confirmation notices required by Paragraphs 9 and 10, except that the transmittal letter must state that the payment is for stipulated penalties and must state for which violation(s) the penalties are being paid.

28. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

29. Subject to the provisions of Section XII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree are in addition to any other rights, remedies, or sanctions available to the United States for Defendant's violation of this Consent Decree or applicable law, including, but not limited to, an action against Defendant for statutory penalties, additional injunctive relief, mitigation or offset measures,

and/or contempt. Where a violation of this Consent Decree is also a violation of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

IX. FORCE MAJEURE

30. "Force majeure," for purposes of this Consent Decree, means any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. The requirement that Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay and any adverse effects of the delay are minimized. "Force majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.

31. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Defendant shall provide notice orally or by electronic or facsimile

transmission to EPA within 72 hours of when Defendant first knew that the event might cause a delay. Within seven (7) Days thereafter, Defendant shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Defendant's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Defendant shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements will preclude Defendant from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Defendant shall be deemed to know of any circumstance of which Defendant, any entity controlled by Defendant, or Defendant's contractors knew or should have known.

32. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time

for performance of the obligations affected by the force majeure event will not, in and of itself, extend the time for performance of any other obligation. EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

33. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Defendant in writing of its decision.

34. If Defendant elects to invoke the dispute resolution procedures set forth in Section X (Dispute Resolution), it shall do so no later than 15 Days after receipt of EPA's notice. In any such proceeding, Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Defendant complied with the requirements of Paragraphs 30 and 31. If Defendant carries this burden, the delay at issue will be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

X. DISPUTE RESOLUTION

35. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section are the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendant's failure to seek resolution of a dispute under this Section will preclude Defendant from raising any such issue as a defense to an action by the United States to enforce any obligation of Defendant arising under this Decree.

36. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree must first be the subject of informal negotiations. The dispute will be considered to have arisen when Defendant sends the United States a written Notice of Dispute. Such Notice of Dispute must state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

37. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the

matter in dispute. The Statement of Position must include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant

38. The United States shall serve its Statement of Position within 45 Days of receipt of Defendant's Statement of Position. The United States' Statement of Position must include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position will be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

39. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XIV of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 20 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion must contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and must set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

40. The United States shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

41. Standard of Review

a. Disputes Concerning Matters Accorded Record Review.

Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 39 pertaining to the adequacy or appropriateness of schedules, protocols, plans, and procedures to implement plans under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 39, Defendant shall bear the burden of demonstrating that its position complies with this Consent Decree and furthers the objectives of the Consent Decree.

42. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant under this Consent Decree, unless and until final resolution of the

dispute so provides. Stipulated penalties with respect to the disputed matter continue to accrue from the first Day of noncompliance, but payment will be stayed pending resolution of the dispute as provided in Paragraph 26. If Defendant does not prevail on the disputed issue, stipulated penalties will be assessed and paid as provided in Section VIII (Stipulated Penalties).

XI. INFORMATION COLLECTION AND RETENTION

43. The United States and its representatives, including attorneys, contractors, and consultants, are entitled to enter into any Facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

b. verify any data or information submitted to the United States maintained by the Defendant in accordance with the terms of this Consent Decree;

c. obtain documentary evidence, including photographs and similar data; and

d. assess Defendant's compliance with this Consent Decree.

44. Until five (5) years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its contractors and agents to preserve (or otherwise provide to Defendant), all non-identical copies of all documents, records, or other information (including documents, records, or other information in

electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendant's performance of its obligations under this Consent Decree. This information-retention requirement applies regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

45. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendant shall deliver any such documents, records, or other information to EPA. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information;

and (6) the privilege asserted by Defendant. However, Defendant shall not withhold, on grounds of privilege, any documents, records, or other information created or generated pursuant to the requirements of this Consent Decree.

46. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

47. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XII. EFFECT OF SETTLEMENT / RESERVATION OF RIGHTS

48. This Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging of this Consent Decree. The resolution of claims provided in this Paragraph extends only to Defendant and does not extend to any other person.

49. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 50. This Consent Decree does not limit the rights of the United States to

obtain civil or criminal penalties or injunctive relief under the CAA or implementing regulations, or any other federal laws, regulations, or permit conditions, and under principles of common law nuisance, except as expressly specified in Paragraph 50. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facilities, whether related to the violations addressed in this Consent Decree or otherwise.

50. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil or criminal penalties, or other appropriate relief relating to a Facility or Defendant's CAA violations at such Facility, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 48.

51. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and Defendant's compliance with this

Consent Decree is not a defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the CAA, or with any other provisions of federal, state, or local laws, regulations, or permits.

52. This Consent Decree does not limit or affect the rights of Defendant or of the United States against any third parties not party to this Consent Decree, nor does it limit the rights of third parties not party to this Consent Decree against Defendant, except as otherwise provided by law.

53. This Consent Decree does not create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XIII. COSTS

54. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States is entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant.

XIV. NOTICES

55. Unless otherwise specified in this Consent Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they must be made in writing and addressed as follows:

To the United States:

eescdcopy.enrd@usdoj.gov
Re: DOJ No. 90-5-2-1-08683/1

and

EES Case Management Unit
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-08683/1

and to:

Air, Pesticides and Toxics Management Division
South Air Enforcement and Toxics Section
U.S. Environmental Protection Agency
Region 4
61 Forsyth Street, S.W.
Atlanta, GA 30303-8960
warrilow.phyllis@epa.gov

Office of Regional Counsel
U.S. Environmental Protection Agency
Region 4 61 Forsyth Street, S.W.
Atlanta, GA 30303-8960
tucker.marlene@epa.gov

To the Defendant:

Keith Arnold, President & CEO
MFG Chemical, LLC
1804 Kimberly Park Drive
Dalton, GA 30720
Phone: 706-226-4114
Email: karnold@mfgchemical.com

56. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

57. Notices submitted pursuant to this Section will be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XV. EFFECTIVE DATE

58. The Effective Date of this Consent Decree is the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

XVI. RETENTION OF JURISDICTION

59. The Court retains jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections X and XVII, or effectuating or enforcing compliance with the terms of this Decree.

XVII. MODIFICATION

60. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it is effective only upon approval by the Court.

61. Any disputes concerning modification of this Decree will be resolved pursuant to Section X of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 41, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XVIII. TERMINATION

62. After Defendant has completed the requirements of Section V (Compliance Requirements) of this Decree, has thereafter maintained satisfactory compliance with this Consent Decree for a period of five years and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States a Request for Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

63. Following receipt by the United States of Defendant's Request for Termination, the Parties shall confer informally concerning the Request and any

disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

64. If the United States does not agree that the Decree may be terminated, Defendant may invoke Formal Dispute Resolution under Paragraphs 37 through 40 of Section X of this Decree, but Defendant may not seek such Dispute Resolution until at least ninety (90) Days after service of its Request for Termination.

XIX. PUBLIC PARTICIPATION

65. This Consent Decree will be lodged with the Court for a period of not less than thirty 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

XX. SIGNATORIES / SERVICE

66. Each undersigned representative of each Party certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

67. This Consent Decree may be signed in counterparts, and its validity may not be challenged on that basis. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXI. INTEGRATION

68. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than reports and notifications that are subsequently submitted pursuant to this Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor may it be used in construing the terms of this Decree.

XXII. FINAL JUDGEMENT

69. Upon approval and entry of this Consent Decree by the Court, this Consent Decree constitutes a final judgment of the Court as to the United States and Defendant MFG Chemical, LLC. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

SO ORDERED this _____ day of ______________________, 2018

____
UNITED STATES DISTRICT JUDGE
Northern District of Georgia

FOR PLAINTIFF UNITED STATES OF AMERICA:

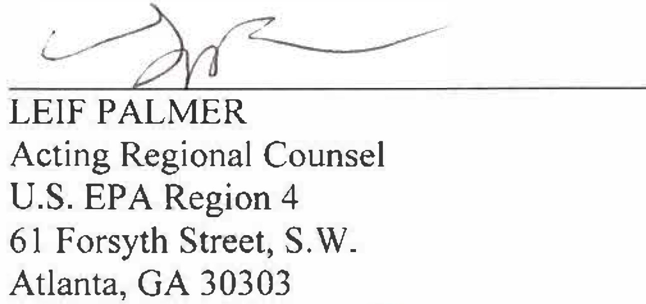
ELLEN MAHAN
Deputy Section Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice

May 21, 2018
Date

s/ *Steven A. Keller, Esq.*
D.C. Bar No. 442219
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Washington, DC 20044
Phone: (202) 514-5465
Facsimile: (202) 514-0097
steve.keller@usdoj.gov

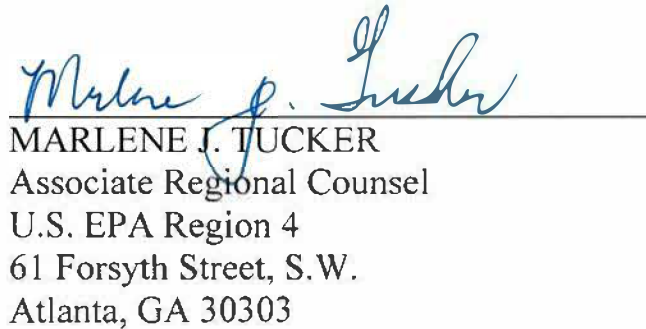
FOR U.S. ENVIRONMENTAL PROTECTION AGENCY:

5/7/18
Date



LEIF PALMER
Acting Regional Counsel
U.S. EPA Region 4
61 Forsyth Street, S.W.
Atlanta, GA 30303

5/7/18
Date



MARLENE J. TUCKER
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FOR DEFENDANT MFG CHEMICAL, LLC:

4-13-18

Date

KEITH ARNOLD
President & CEO
MFG Chemical, LLC
1804 Kimberly Park Drive
Dalton, GA 30720

APPENDIX A

INJUNCTIVE RELIEF

I. LIST OF TERMS

"Engineering Firm" or "Firm" shall mean the engineering firm hired by MFG pursuant to Section II of this Appendix, which shall be a qualified multi-disciplinary Engineering Firm that employs professional design engineers that are licensed to perform engineering in the State of Georgia for the purpose of design and specification of chemical processing facilities for construction. The Firm must have experience in chemical process engineering and design and specification of chemical facilities. The design experience must include specifications of components, sizing, equipment layout, placement, and configuration of the following: structures, piping components, reactors, heat exchangers, coolers, utilities, pumps, piping, instrumentation, process controls, wiring, pipe racks, wire racks, emergency vents, process safety devices, motor control centers, etc., that ultimately lead to the construction of actual chemical facilities. The Firm must have on staff, engineers trained and experienced in many disciplines of engineering, including, but not limited to, mechanical, civil, chemical, electrical, instrumentation, process control, environmental, safety engineering, and professional piping design involving experience with design, layout, safety, and maintenance in the chemical industry. The Firm must provide its engineers with relevant training and experience to oversee and check all tasks required by this consent decree. The Firm must have experience with design of pressure relief systems and piping and piping header systems for chemical reactors with respect to design for worst case pressure, fire, and runaway reactions per published design codes. The Firm must have expertise in the design of heat removal and exchange and cooling loads in conjunction with chemical reactors. The Firm must possess knowledge and experience with all types of process hazard analyses (PHAs) and must have experience in conducting PHAs. All engineers working on tasks required under this Appendix A must be supervised by a board-licensed professional engineer, and the completion of all tasks required under Section III A-F of this Appendix must be certified by a board-licensed professional engineer.

"Process Equipment" shall mean equipment used to process or manufacture specific chemicals or chemical products, as well as equipment that can control, prevent, or mitigate catastrophic chemical releases, including pressure vessels, storage tanks, piping systems (piping components such as valves), pressure relief systems components (relief and vent systems and devices), emergency shutdown systems and controls (monitoring devices, sensors, alarms, and interlocks), pumps and utility systems, reactors, condensers, heat exchangers, dryers, evaporators, and associated equipment.

"Process and Instrumentation Drawings" or "P&ID" shall mean engineering drawings depicting the connectivity of Process Equipment and the instrumentation used to control such equipment. These drawings are a prerequisite for PHAs such as hazard and operability studies (HAZOP) and fault tree analyses.[1]

"RAGAGEP" (Recognized and Generally Accepted Good Engineering Practices) shall mean those practices identified in the codes, standards, guidelines, and other recommended practices referenced in latest versions of the publications identified in the footnotes herein as of the effective date of the Consent Decree.[2,3]

"Mechanical Integrity and Preventive Maintenance" shall mean the system of assuring that process equipment is in satisfactory condition for safely and reliably performing its intended design function and to operate properly within the limits of established process safety information.

II. QUALIFIED ENGINEERING FIRM: Within 60 days of the Effective Date of the Consent Decree, MFG shall hire a qualified Engineering Firm to perform an appropriate hazard assessment in accordance with the requirements set forth in this Appendix A. MFG shall submit documentation, including any relevant contract for performance, to EPA

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[1] The American Institute of Chemical Engineers (AIChE) Center for Chemical Process Safety (CCPS) *Guidelines for Hazard Evaluation Procedures, 2nd edition*, page 65, states: "The HAZOP analysis requires accurate, up-to-date P&IDs or equivalent drawings, and other detailed process information, such as operating procedures."

[2] The AIChE CCPS *Guidelines for Mechanical Integrity Systems:* "Recognized and Generally Accepted Good Engineering Practices" (RAGAGEP) are the basis for engineering, operation, or maintenance activities and are themselves based on established codes, standards, published technical reports or recommended practices (RP) or similar documents. RAGAGEP detail generally approved ways to perform specific engineering, inspection, or mechanical integrity activities, such as fabricating a vessel, inspecting a storage tank, or servicing a relief valve.

[3] For the United States Department of Labor, Occupational Safety and Health Administration's RAGAGEP interpretation, see https://www.osha.gov/p1s/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=30785 .

within 10 days after hiring demonstrating that the Engineering Firm meets the qualifications as defined in Section I (List of Terms).

III. <u>REACTIVE CHEMICAL HAZARD ASSESSMENT:</u> The Engineering Firm shall perform a hazard assessment for all three Facilities, which shall be completed by no later than nine months from the Effective Date of the Consent Decree. Each hazard assessment shall include, but not be limited to, the following:

A. **<u>Characterization of Reaction Chemistry and Thermodynamic Analysis</u>**
Verify that all chemical reactions and potential runaway exothermic chemical reactions have been identified and characterized for all chemicals currently produced at the three MFG Facilities. For this task, the Engineering Firm shall at a minimum review and retrieve data from MFG's standard operating procedures, process drawings, equipment specifications, physical property, and thermodynamic data, including, but not limited to, vapor pressures, peroxide, and/or maleic anhydride decomposition rates, non-condensable gas generation, and exothermic reaction kinetics for all chemicals currently manufactured or produced at each MFG Facility and shall verify that all chemical reaction scenarios are identified and thermodynamically characterized. The Engineering Firm shall review existing analyses, process safety information and chemical process reaction chemistry, rates of reaction, exotherms, or rapid rise of temperature due to chemical reaction, heat of mixing, heat of reaction analysis, maximum pressures and flow rates, temperature profiles produced, and shall determine the heat generated for all chemical reactions for all chemicals that are currently produced and managed. This information shall be used in Section B (Pressure Relief Device Analysis), and Section D (Cooling Water Assessment for Reactors), below.

B. **<u>Pressure Relief Device Analysis</u>**

1. *Develop overpressure scenarios and pressure relief device evaluation* —Review existing overpressure scenarios and pressure relief device calculations and develop a list of overpressure scenarios from the thermodynamic analysis in Section III.A of this Appendix. Consider potential incompatibilities and overpressure due to mischarge of reactor, change in charge rate or charge quantity, addition of the wrong

chemical, as well as potential runaway reactions or exotherms. Consider conventional overpressure scenarios such as blocked flow, fire, etc. Review existing overpressure scenarios and pressure relief device calculations and determine the worst-case scenarios for pressure relief. The analysis shall consider scenarios of engulfment in flames, runaway reactions, and overpressure development from external sources such as inert gases or compressed air. Include all scenarios in accordance with RAGAGEP. The pressure relief device design evaluation shall include an evaluation of inlet piping effects and backpressure effects for each device and must consider the close proximity of the reactor vessels.

2. *Review existing pressure relief calculations* — Review existing pressure relief design basis and calculations, and using information developed pursuant to Section III.B.1, update as needed for all pressure safety devices, including rupture disks and/or pressure safety valves based on the pressures, temperatures, and flow rates determined from the thermodynamic characterizations obtained in Section III.A of this Appendix. If pressure relief devices were recently removed, provide justification, calculations and narrative as to conformance with RAGAGEP.

3. *Ensure conformity with industry standards* — Ensure conformity of MFG Facilities with all applicable RAGAGEP, including, but not limited to, the pressure vessel and pressure relief requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section VIII, American Petroleum Institute (API) RP 520 "Recommended Practice for the Sizing, Selection, and Installation of Pressure-Reliving Systems," ANSI/ASME B31.3 Code for Pressure Piping, the AICHE Center for Chemical Process Safety's publication "Guidelines for Pressure Relief and Effluent Handling Systems Guidelines." Also, ensure conformity of MFG Facilities with the State of Georgia Boiler and Pressure Vessel codes (Office of Insurance and Fire Safety Commissioner) requirements. Specify new or replacement or supplementary pressure relief devices as needed.

4. *Update Engineering Drawings* — Review and update process and instrumentation diagrams (P&IDs) at all three MFG Facilities to ensure that all components requiring pressure relief protection have been identified and all devices are fully noted in the diagrams. Ensure conformity with all applicable RAGAGEP, including, but not limited to, the requirements of the ANSI/ISA S5.1 (R 1992) "Instrumentation Symbols and Identification" standard with respect to P&IDs.

C. **Chemical Reactor Pressure Relief Device Piping Systems —** Verify that each reactor's emergency vent and pressure relief header systems, piping, and hazardous vapor/liquid containment will prevent the accidental release of vapors to other reactors, nearby waterways, and the atmosphere and minimize the consequences of any such release. To complete this task, the Engineering Firm shall, at a minimum, review existing documents and conduct the following:

1. Perform design calculations for each reactor's emergency vent piping and pressure relief header pipe away systems, and hazardous vapor/liquid catch tank containment systems, to determine the appropriate size, configuration, and material of construction that would prevent the accidental release of chemicals to adjacent tanks and the atmosphere;

2. Determine whether the current single pipeline header is appropriate to meet applicable codes, standards, and RAGAGEP, giving due consideration to the history of any past incidents at the MFG Facilities involving overflow that entered adjacent reactors from the header, which resulted in overpressures; rupture of the neighboring reactors' pressure relief device rupture disks; and contamination of the reactors;

3. Confirm that the piping runs and bends are accounted for in the stress analysis, as the chemical reactors are closely placed with only inches between each pipeline;

4. Perform pipeline calculations to determine line size based on consideration of flowrate, composition, supersonic flow, and two-phase flow;

5. Run computerized pipeline stress analysis and calculations to account for the forces of ejection of chemicals during the worst-case overpressure scenarios and design the piping to withstand such forces;

6. Verify that the existing piping supports are appropriate for the results of the analysis, including worst-case overpressure scenarios;

7. Verify that the size and material of construction of the piping is compatible for the specific chemical service, reviewing the physical properties of the chemicals and how those chemicals may react with the chemical makeup of the piping; and

8. Verify that the piping system relating to the relief header is compliant with all applicable RAGAGEP including, but not limited to: the American National Standards Institute/ American Society of Mechanical Engineers (ANSI/ASME B31.3) Chemical Process Piping Code; Pipe Fabrication Institute (PFI) standards; and Manufacturer' Standardization Society (ANSI/MSS) of the Valve and Fittings Industry.

D. **Cooling Water Assessment for Reactors** — MFG shall install cooling towers at the Brooks and Callahan facilities.[4] As part of that process, the Engineering Firm shall review existing documents and conduct an assessment of the cooling water requirements for all chemical reactions processed at all MFG Facilities that use city water, including, but not limited to, the following:

1. Compile and complete comprehensive energy balances around each reactor and all expected chemical reactions to account for all combinations of cooling load and runaway polymerization reactions, heat of mixing, heat of reaction, rate of temperature rise, etc., including a scenario in which all reactors are running at once with the most exothermic or maximum heat removal required;

[4] As part of the work required under this settlement, MFG has already installed a cooling tower at the Kimberly Park facility.

2. Integrate process safety interlocks to prevent startup and initiate shutdown of the manufacturing chemical process if cooling is insufficient;

3. Determine set points for low and high settings for alarms and shutoff safeguards in the chemical process control systems; and

4. Install hard-wired safety interlocks (switches) to prevent startup of reactors if cooling water flow is too low and/or if cooling water high temperature is too high using the set points as parameters to prevent or stop the process.

E. **Operating Procedures** — The Engineering Firm shall evaluate operating procedures for the following: (1) Preventative Maintenance; (2) Mechanical Integrity; (3) Operator Procedures; (4) Training; (5) Management of Change; and (6) Pre-Start-Up Safety Review (PSSR). To the extent the standard operating procedures, process drawings, equipment specifications, mechanical integrity, and/or preventive maintenance are inadequate, the Engineering Firm shall advise MFG as to the needed requirements.

F. **HAZOP Analysis** — Review and update the existing HAZOP analysis at all three Facilities to include, but not be limited to, the information in Section III.A through III.E of this Appendix. In addition, complete a root cause analysis for release incidents that have occurred at any of the three Facilities, including, but not limited to, the May 2012 incident at the Callahan Facility and the July 2014 incident at the Kimberly Park Facility.

G. **Completion Statement** — Within 30 days of completion of all tasks required under Section III.A-F of this Appendix, MFG shall provide EPA with the following written certification signed by representatives of both the Engineering Firm and MFG management:

> I certify under penalty of law that all the tasks under Section III.A through III.F of this Appendix have been completed. I am aware that there are significant penalties for submitting

false information, including the possibility of fine and imprisonment for knowing violations.

IV. HAZARD ASSESSMENT RECOMMENDATIONS

A. Within 30 days of completion of the hazard assessments prescribed in Section III of this Appendix, MFG shall provide EPA with a copy of a final hazard assessment report for all three facilities that, based on the work conducted in Section III of Appendix A, does the following:

i. Identifies each inconsistency with all applicable codes, standards, and RAGAGEP and lists them by priority according to the most severe inconsistencies; and

ii. Describes the inconsistency and the corrective action needed to conform to the applicable code(s), standard(s), and/or RAGAGEP.

B. Within 60 days of submitting the final hazard assessment reports prescribed in Section IV.A of this Appendix, MFG shall submit to EPA an Implementation Plan and Schedule (IPS) for all three Facilities for implementation of the recommendations identified in the hazard assessment reports.

C. Within three (3) months of submission of the IPS to EPA, MFG shall send an IPS status report for all three Facilities to EPA identifying the status of implementing corrective actions for each inconsistency identified in the final hazard assessment reports. Thereafter, MFG shall submit to EPA an IPS status report every three (3) months until the work identified under the hazard assessments and scheduled in the IPS is completed. Each status report for each of the three Facilities must include the corrective actions that have been taken and that will be taken, and shall also include, but not be limited to, documentation such as all work orders, invoices, and receipts demonstrating that each corrective action has been completed.

D. Within two (2) years of developing the IPS referenced in Section IV.B, MFG shall complete implementation of all corrective actions identified in the final hazard assessment reports and the IPS for all three Facilities.

E. Within 60 days of completion of all corrective actions identified in the final hazard assessment reports and the IPS for all three Facilities, MFG shall provide EPA with final reports for each of the three Facilities documenting that all inconsistencies identified in the final hazard assessment reports have been corrected and completed. The final reports shall include the following written certification signed by representatives of both the Engineering Firm and MFG management:

> I certify under penalty of law that all inconsistencies identified in the final hazard assessment reports for each of the three Facilities prepared under Section IV.A of this Appendix have been completed. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.