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19		
20	UNITED STATES OF AMERICA,	
21	CIVILED STATES OF AWIERCA,	G!
	and	Civ. No. 4:18-cv-06506
22		
23	THE STATE OF MISSISSIPPI,	CONSENT DECREE
1	Plaintiffs,	
24	Fianturis,	
25	v.	
26		
,,	CHEVRON U.S.A. INC.,	
27	Defendant.	
28	Defendunt.	

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I. **BACKGROUND**

2	A. WHEREAS, the United States of America ("United States"), on behalf of the
3	United States Environmental Protection Agency ("EPA"), will file a Complaint, concurrently
4	with the lodging of this Consent Decree, against Chevron U.S.A. Inc. ("CUSA") for alleged
5	violations of Sections 112(r)(1) and 112(r)(7) of the Clean Air Act ("CAA"), 42 U.S.C.
6	§ 7412(r)(1) and 7412(r)(7), Section 103 of the Comprehensive Environmental Response,
7	Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9603, and Section 304 of the
8	Emergency Planning and Community Right-to-Know Act ("EPCRA"), 42 U.S.C. § 11004, and
9	implementing regulations, at petroleum refineries owned and operated by CUSA located in:
10	Richmond, California ("Richmond Refinery"); El Segundo, California ("El Segundo Refinery");
11	Pascagoula, Mississippi ("Pascagoula Refinery"); and North Salt Lake City, Utah ("Salt Lake
12	City Refinery") (collectively, "Covered Refineries"), as well as the petroleum refinery formerly
13	owned and operated by CUSA in Kapolei, Hawaii ("Kapolei Refinery"). The State of
14	Mississippi, acting through the Mississippi Commission on Environmental Quality and the
15	Mississippi Department of Environmental Quality (collectively, "the MDEQ") is a co-plaintiff,
16	joining in certain of the allegations regarding the Pascagoula Refinery, pursuant to its authority
17	under Mississippi Air and Water Pollution Control Law, Miss. Code Ann. § 49-17-1, et seq.
18	B. WHEREAS, the Complaint to be filed by plaintiffs the United States and the
19	MDEQ (collectively, "Plaintiffs") against CUSA will allege that:
20	1. CUSA, at the Covered Refineries and the Kapolei Refinery, violated the
21	Chemical Accident Prevention and Planning regulations promulgated under Section 112(r)(7) of
22	the CAA, 42 U.S.C. § 7412(r)(7), codified at 40 C.F.R. Part 68, and referred to as the Risk
23	Management Program ("RMP"), including violations of the following regulations at one or more
24	processes at the refineries listed: 40 C.F.R. §§ 68.12-15 (Richmond Refinery, El Segundo
25	Refinery, Kapolei Refinery, Salt Lake City Refinery); 40 C.F.R. § 68.65 (Richmond Refinery, El
26	Segundo Refinery, Kapolei Refinery, Pascagoula Refinery); 40 C.F.R. § 68.67 (Richmond

Refinery); 40 C.F.R. § 68.69 (Richmond Refinery, El Segundo Refinery, Kapolei Refinery, Salt

Refinery, El Segundo Refinery, Kapolei Refinery, Pascagoula Refinery, Salt Lake City

1	Lake City Refinery); 40 C.F.R. § 68.71 (Richmond Refinery, El Segundo Refinery, Salt Lake
2	City Refinery); 40 C.F.R. § 68.73 (Richmond Refinery, El Segundo Refinery, Kapolei Refinery,
3	Salt Lake City Refinery); 40 C.F.R. § 68.75 (Richmond Refinery, El Segundo Refinery, Kapolei
4	Refinery, Salt Lake City Refinery); 40 C.F.R. § 68.77 (El Segundo Refinery, Kapolei Refinery);
5	40 C.F.R. § 68.79 (Richmond Refinery, Kapolei Refinery); 40 C.F.R. § 68.81 (Richmond
6	Refinery); 40 C.F.R. §68.87 (El Segundo Refinery); 40 C.F.R. § 68.95(a) (Richmond Refinery,
7	Kapolei Refinery); 40 C.F.R. § 68.150 (El Segundo Refinery, Pascagoula Refinery); 40 C.F.R. §
8	68.175 (El Segundo Refinery); 40 C.F.R. § 68.195(a) (El Segundo Refinery) and 11 Miss.
9	Admin. Code, Pt. 2, R. 8.2 (Pascagoula Refinery);
10	2. CUSA, at certain units of the Richmond Refinery and the Pascagoula
11	Refinery, failed to meet its obligation to design and maintain a safe facility and, at the
12	Pascagoula Refinery, to identify hazards using appropriate hazard assessment techniques as
13	required by the General Duty Clause of the CAA, 42 U.S.C. § 7412(r)(1);
14	3. CUSA, at the Richmond Refinery, violated Section 103(a) of CERCLA,
15	42 U.S.C. § 9603(a), by failure to timely notify national authorities of an August 2, 2012
16	hydrogen sulfide release; and
17	4. CUSA, at the Richmond Refinery, violated Section 304 of EPCRA, 42
18	U.S.C. § 11004, by failure to notify state and local authorities of that same release.
19	C. WHEREAS, EPA began an investigation at the Richmond Refinery following a
20	loss-of-containment incident and fire at the Richmond Refinery on August 6, 2012.
21	D. WHEREAS, EPA subsequently expanded its investigation to the other Covered
22	Refineries and the Kapolei Refinery, and, based on those investigations, issued: sixty-four (64)
23	Findings of Violation against the Richmond Refinery; thirty (30) Findings of Violation against
24	the Kapolei Refinery; eleven (11) Notice of Inspection Findings and two (2) Areas of Concern
25	against the Salt Lake City Refinery; twenty-four (24) Potential Findings against the El Segundo
26	Refinery; and five (5) Notices of Potential Violations against the Pascagoula Refinery, alleging
27	violations of Section 112(r) of the CAA and implementing regulations at 40 C.F.R. Part 68
28	including, but not limited to, violations of requirements contained in: Section 68.12, General

1	Requirements; Section 68.15, Management; Section 68.20, Hazard Assessment – Applicability
2	Section 68.65, Process Safety Information; Section 68.67, Process Hazard Analysis;
3	Section 68.69, Operating Procedures; Section 68.71, Training; Section 68.73, Mechanical
1	Integrity; Section 68.75, Management of Change; and Section 68.77, Pre-Startup Review.

- E. WHEREAS, as a result of its investigation at the Richmond Refinery, the California Department of Industrial Relations, Division of Occupational Safety and Health, an agency of the State of California, issued citations and a Notification of Penalty dated January 30, 2013, which contained seventeen (17) citations alleging violations of Title 8, California Code of Regulations at the Richmond Refinery including, but not limited to: violations of requirements contained in Section 3203, Injury and Illness Prevention Program; Section 5141, Engineering Controls; Section 5144, Respiratory Protection Program; and Section 5189, Management of Change, Mechanical Integrity, Operating Procedures, Process Hazard Analysis, and Process Safety Information (collectively, "Citations").
- F. WHEREAS, the State of California, through the California Department of Industrial Relations, Division of Occupational Safety and Health, has entered into an administrative settlement with CUSA approved July 20, 2017 resolving all of the violations alleged in the Citations issued on January 30, 2013, over which that California state agency has jurisdiction.
- G. WHEREAS, CUSA does not admit any liability to the United States, the MDEQ or otherwise arising out of the allegations to be contained in the Complaint. CUSA also makes no admission of fact or law regarding the allegations in EPA's: Revised Summary of Findings issued for the Richmond Refinery, dated January 30, 2014; Notification of Inspection Findings and Areas of Concern issued for the Salt Lake City Refinery, dated May 14, 2015; Investigation Report for the El Segundo Refinery, dated November 10, 2015; Notice of General Duty Clause and Risk Management Program Violations for the Pascagoula Refinery, dated October 20, 2016; and Investigation Report for the Kapolei Refinery, dated November 24, 2015. CUSA denies that it violated any of the cited federal or state statutory provisions and regulations and maintains that it has been and remains in compliance with all applicable statutes and regulations.

1	H. WHEREAS, immediately following the August 6, 2012 R	ichmond Refinery
2	2 incident, CUSA began designing and implementing comprehensive program	rams to enhance its
3	emergency response and mechanical integrity programs.	
4	I. WHEREAS, CUSA has agreed, in the interest of settleme	nt of the violations
5	alleged by the Plaintiffs, to initiate and/or complete enhancements to med	chanical integrity and
6	safety processes, and to replace certain existing process piping susceptible	e to sulfidation
7	corrosion, as set forth herein. Solely for the purpose of settlement, and to	o further ensure CUSA's
8	8 compliance with existing requirements, CUSA agrees to satisfy the oblig	ations described below
9	9 in Section VII (Technical Authority Process), Section VIII (Sulfidation C	Corrosion Inspections),
10	Section IX (Carbon Steel Piping Replacement), Section X (Fired Heater)	Pilot Study), Section XI
11	1 (Integrity Operating Windows), Section XII (Fitness-for-Service Training	g), and Section XIII
12	2 (Emergency Response Training).	
13	J. WHEREAS, CUSA has implemented a Technical Authori	ty Process, described in
14	more detail in Section VII below, to enhance process safety at the Covere	ed Refineries through
15	the development of Manufacturing TA Directives specifically designed to	o prevent fatalities and
16	6 High-Consequence Loss-of-Containment Incidents at the Covered Refine	eries. Through this
17	process, CUSA has developed Manufacturing TA Directives on several to	opics, including:
18	a. MFG 205 (Leak Response Protocol Instruction), co	urrent version dated
19	9 June 2015;	
20	b. MFG 210 (Fired Equipment Operation), current ve	ersion dated May 2016;
21	c. MFG 325 (Hazard and Operability and Layers of F	Protection Analysis),
22	2 current version dated December 2016;	
23	d. MFG 520 (Damage Mechanism Review), current v	version dated
24	4 August 2015;	
25	e. MFG 525 (Fixed Equipment Asset Strategies), cur	rent version dated
26	6 September 2018;	
27	f. MFG 530 (Fixed Equipment Integrity Threat Reco	mmendation and
28	8 Resolution), current version dated December 2017; and	

1	g. MFG 535 (Sulfidation Inspection Project), current version dated
2	September 2016, initially issued October 2014.
3	K. WHEREAS, although not required to do so by the CAA or its implementing
4	regulations, CUSA currently implements certain RMP, Program Level 3 requirements [40 C.F.R
5	§ 68.10(d)] on processes at the Covered Refineries that are appropriately assigned as Program
6	Level 1 [40 C.F.R. § 68.10(b)]. In general, CUSA's current practice is to apply the principal
7	requirements included within each general RMP element listed below for Program Level 3
8	processes to substantially all of its Program Level 1 processes at the Covered Refineries:
9	a. Process Hazard Analyses — Prepare process hazard analyses;
0	b. Operating Procedures — Develop and implement written operating
1	procedures;
2	c. Management of Change — Establish and implement procedures to
3	manage changes to process chemicals, technology, equipment, and procedures;
4	d. Mechanical Integrity — Establish and implement written procedures to
5	maintain the ongoing integrity of process equipment; and
6	e. Incident Investigation — Investigate each incident that resulted in, or
7	could reasonably have resulted in a catastrophic release of a regulated substance.
8	L. WHEREAS, CUSA has no current intention of changing the practice described in
9	Paragraph K; however, in the event CUSA determines that it will discontinue this practice, it wil
20	provide EPA and the MDEQ written notice before discontinuing the practice (in whole or in
21	part) at the Covered Refineries. CUSA's obligation to provide notice under this provision will
22	end three (3) years after the Effective Date. Other than the obligation to provide notice as set
23	forth in the preceding sentence, this whereas clause does not expand or in any manner alter
24	CUSA's obligations under applicable law. Further, nothing in this whereas clause reflects a
25	determination by EPA as to whether Program Level 1 or Program Level 3 is the appropriate
26	assignment for any particular process at the Covered Refineries.
27	M. WHEREAS, the Parties agree there are significant and tangible benefits achieved
28	by obligating CUSA, through the operation of this Consent Decree, to complete and maintain

process safety enhancements at its Covered Refineries as set forth herein. Such benefits include
but are not limited to, an enforceable mandate imposed by judicial decree to (a) initiate and/or
complete these enhancements according to the terms and conditions set forth herein, and
(b) establish the potential recovery of stipulated penalties in the event CUSA does not adhere to
the terms and conditions contained in this Consent Decree.

- N. WHEREAS, the Parties recognize, 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 litigation among the Parties and that this Consent Decree is fair, reasonable and in the public interest.
- O. WHEREAS, the Parties have agreed that the entry of this Consent Decree or any act performed hereunder is not an admission or evidence of any wrongdoing, fault, omission, liability, or of the validity of any Party's claims, defenses, or assertions, and is the most appropriate means of resolving these matters without further litigation.
- P. NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section II (Jurisdiction and Venue), and with the consent of the Parties, IT IS HEREBY ORDERED AND DECREED as follows:

II. <u>JURISDICTION AND VENUE</u>

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Sections 112(r)(1) and 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(1) and 7412(r)(7), Section 103 of CERCLA, 42 U.S.C. § 9603, and Section 304 of EPCRA, 42 U.S.C. § 11004, and over the Parties. This Court also has supplemental jurisdiction over state claims pursuant to 28 U.S.C. § 1367. Venue is proper in this District pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), Section 113(b) of CERCLA, 42 U.S.C. § 9613(b), and Section 326(b)(2) of EPCRA, 42 U.S.C. § 11046(b)(2), 28 U.S.C. §§ 1391(b) and (c), and 28 U.S.C. § 1395(a), because CUSA maintains its principal place of business in this judicial district, and certain of the violations alleged in the Complaint are alleged to have occurred in this judicial district. For purposes of this Consent Decree, or any action to enforce

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this Consent Decree, CUSA consents to the Court's subject matter jurisdiction and its jurisdiction over CUSA, and to venue in this judicial district.

2. For purposes of this Consent Decree, CUSA agrees that the Complaint states claims upon which relief may be granted pursuant to Sections 112(r)(1) and 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(1) and 7412(r)(7), Section 103 of CERCLA, 42 U.S.C. § 9603, and Section 304 of EPCRA, 42 U.S.C. § 11004.

APPLICABILITY III.

- 3. The provisions of this Consent Decree apply to and are binding upon the United States and the MDEQ, and upon CUSA and any successors, assigns, or other entities or persons otherwise bound by law.
- 4. CUSA must provide a copy of this Consent Decree to all officers whose duties reasonably include compliance with any provision of this Consent Decree. For all employees whose duties reasonably include compliance with any provision of this Consent Decree, as well as for any contractor retained to perform work required under this Consent Decree, CUSA must provide a copy of the portions of this Consent Decree that are applicable to the employee's duties or the contractor's work. After the Effective Date, CUSA must condition any contract it enters into for the performance of work required by this Consent Decree upon performance of the work in conformity with the applicable terms of this Consent Decree. Copies of the applicable provisions of the Consent Decree do not need to be supplied to contractors or vendors that are retained to supply materials or equipment to satisfy the requirements of this Consent Decree.
- 5. In any action to enforce this Consent Decree, CUSA will 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.

IV. **DEFINITIONS**

6. Terms used in this Consent Decree that are defined in the CAA, CERCLA, EPCRA, or in regulations promulgated pursuant to those statutes will have the meanings assigned to them in the CAA, CERCLA, EPCRA, or such regulations, unless otherwise provided in this Consent Decree. The definitions set forth below, by themselves, do not create or impose

1	any obligations on any Party. Whenever the terms set forth below are used in this Consent
2	Decree, the following definitions will apply:
3	A. "ASME" means the American Society of Mechanical Engineers, a
4	professional engineering association that promotes the art, science and practice of
5	multidisciplinary engineering and allied sciences through continuing education, training and
6	professional development, development of engineering codes and standards, and other forms of
7	outreach.
8	B. "API" means the American Petroleum Institute, a United States national
9	trade association that represents all aspects of America's oil and natural gas industry. API
0	committees, with industry participation, generate and update industry codes and standards,
1	recommended practices, and technical papers to assist the oil and natural gas industry in
2	improving the efficiency of operations, complying with legislative and regulatory requirements,
3	safeguarding health and protecting the environment.
4	C. "Chrome-Alloy" means iron-based piping containing or composed of
5	either: (a) chrome (Cr)-alloy content of 11/4% by weight Cr-alloy or higher; or (b) stainless steel.
6	D. "Clean Air Act," or "CAA," means the federal law set forth at 42 U.S.C. §
7	7401, et seq.
8	E. "Complaint" means the complaint filed by the United States and the
9	MDEQ in this action.
20	F. "Completion Report" means: (a) a report that CUSA may, at its discretion,
21	submit certifying to EPA its completion and full implementation of the Consent Decree
22	compliance requirements described in the final Paragraph of any of the following Sections: VII,
23	(Paragraph 19), VIII (Paragraph 24), IX (Paragraph 27), X (Paragraph 34), XI (Paragraph 41),
24	XII (Paragraph 47), and/or XIII (Paragraph 52); and (b) the report required to be submitted
25	certifying to EPA CUSA's completion of the SEP pursuant to Section XIV (Paragraph 57).
26	G. "Comprehensive Environmental Response, Compensation and Liability
27	Act" or "CERCLA" means the federal law set forth at 42 U.S.C. § 9601, et. seq.
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1	H. "Consent Decree" means this Consent Decree, including all appendices
2	attached hereto.
3	I. "Console Operator" means a CUSA employee who monitors and controls
4	plant operations through a distributed control system by, among other things, acknowledging
5	alarms, making set-point changes, and monitoring critical alarm panels which indicate deviations
6	from SOLs.
7	J. "Covered Refineries" means petroleum refineries that CUSA owns and
8	operates located in El Segundo, California; Richmond, California; North Salt Lake City, Utah;
9	and Pascagoula, Mississippi.
10	K. "CS" means carbon steel, or steels that do not have alloying elements
11	intentionally added, although there may be small amounts of alloying elements permitted by
12	specifications that can affect corrosion resistance, hardness after welding, and toughness.
13	L. "CUSA" means Chevron U.S.A. Inc., a Pennsylvania corporation.
14	M. "Damage Mechanism" means physical and/or chemically induced flaws,
15	defects, deterioration, or degradation of refinery process equipment caused by exposure to
16	process conditions identified in API Recommended Practice 571 (2nd ed., April 2011).
17	N. "Day" means a calendar day unless expressly stated to be a business day.
18	In computing any period of time under this Consent Decree, where the last day would fall on a
19	Saturday, Sunday, or federal holiday, the period will run until the close of business on the next
20	business day.
21	O. "Effective Date" will have the definition provided in Section XXIV.
22	P. "El Segundo Refinery" means the petroleum refinery located in El
23	Segundo, California that CUSA owns and operates.
24	Q. "Emergency Planning and Community Right-To-Know Act" or "EPCRA"
25	means the federal law set forth at 42 U.S.C. § 11001, et. seq.
26	R. "EPA" means the United States Environmental Protection Agency.
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1	S. "ETC" means Chevron Energy Technology Company (a CUSA division),
2	an internal technology provider and technical consultant to CUSA that focuses on the
3	development and delivery of technical services.
4	T. "First Responders" means CUSA personnel designated by CUSA as
5	members of each Covered Refinery's emergency-response and/or incident management teams.
6	U. "Fitness-for-Service" or "FFS" means a methodology whereby a flaw or a
7	damage state in a component is evaluated in order to determine the adequacy of the component
8	for continued operation.
9	V. "High-Consequence Loss-of-Containment Incident" means an unplanned
10	or uncontrolled release of material that, based upon the professional judgment and experience of
11	CUSA SMEs, could have severe consequences on people, property, or the environment
12	(informed by "Tier 1 Process Safety Events" as defined in API Recommended Practice 754 (2 nd
13	ed., April 2016)).
14	W. "Incident Commander" means CUSA personnel designated by CUSA to
15	lead each Covered Refinery's emergency response and/or incident management teams.
16	X. "Integrity Operating Window" or "IOW" means an established limit for a
17	specific process variable that may affect a Damage Mechanism and the integrity of equipment if
18	the process operation deviates outside the established limit. The four different categories of
19	IOWs referenced in this Consent Decree are: SOL, IOW-1, IOW-2, and IIL.
20	Y. "IOW-1" means an IOW limit set to monitor conditions that could result
21	in rapid degradation of equipment integrity. A deviation outside an established IOW-1 limit will
22	trigger: (a) a control-room alarm for measurements that are electronically transmitted to the
23	distributed control system that requires a predetermined operator response; and (b) e-mail alerts
24	that are sent automatically to select CUSA personnel. An IOW-1 is based on a high-"Standard"
25	limit as described in API Recommended Practice 584 (1st ed., May 2014).
26	Z. "IOW-2" means an IOW limit set to monitor conditions that could result
27	in slower-acting degradation of equipment integrity. A deviation outside an established IOW-2

1	limit will trigger e-mail alerts sent automatically to select CUSA personnel. An IOW-2 is based
2	on a "Standard" limit as described in API Recommended Practice 584 (1st ed., May 2014).
3	AA. "IOW Informational Limit" or "IIL" means an IOW set to monitor
4	conditions for which additional technical analysis might be warranted. A deviation from an
5	established IIL will trigger e-mail alerts sent automatically to select CUSA personnel. An IIL is
6	based on an "IOW Informational limit" as described in API Recommended Practice 584 (1st ed.,
7	May 2014).
8	BB. "Inspection Isometric Number" means the numeric designation given to a
9	CUSA drawing that depicts the orientation and layout of specific sections of Process Piping
10	within a Process Unit.
11	CC. "Kapolei Refinery" means the petroleum refinery formerly owned and
12	operated by CUSA in Kapolei, Hawaii.
13	DD. "Manufacturing TA Directive" means documentation, issued by the
14	Technical Authority Council to Covered Refineries, which is specifically designed to prevent
15	fatalities and High-Consequence Loss-of-Containment Incidents and includes standards and
16	instructions.
17	EE. "MDEQ" means the State of Mississippi, acting through the Mississippi
18	Commission on Environmental Quality and the Mississippi Department of Environmental
19	Quality.
20	FF. "Minimum Required Thickness" means the thickness without corrosion
21	allowance for each component of a piping system based on the appropriate design code
22	calculations and code allowable stress that consider pressure, mechanical, and structural
23	loadings. This definition is based on API 570, Section 3.1.59 (4 th ed., February 2016).
24	GG. "Mitigation Plan" means a set of actions to manage the remaining life of
25	Process Piping.
26	HH. "Operational Interest" means all or part of CUSA's right to be the
27	operator (as that term is defined by the CAA) of any Covered Refinery.
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1	II. "Ownership Interest" means all or part of CUSA's legal or equitable
2	ownership interest (as that term is defined by the CAA) of any Covered Refinery.
3	JJ. "Paragraph" means a portion of this Consent Decree identified by an
4	Arabic numeral.
5	KK. "Party" or "Parties" means the United States, the MDEQ and CUSA,
6	individually or collectively.
7	LL. "Pascagoula Refinery" means the petroleum refinery located in
8	Pascagoula, Mississippi that CUSA owns and operates.
9	MM. "Pilot Study" means the Fired Heater Pilot Study described in Section X.
10	NN. "Pilot Study Controls" means the automated controls described in
11	Paragraph 28.
12	OO. "Pilot Study Report" means the written report required by Paragraph 32.
13	PP. "Piping Component" means a single segment of straight pipe or a single
14	pipe fitting (e.g., elbow, reducer, or tee), separated from adjacent pipe segments and/or fittings
15	by welds and/or flanges. Welds, valves, pump casings, bull plugs, slip-on flanges, socket-weld
16	flanges, and any other component where precise thickness measurements cannot be taken are
17	excluded.
18	QQ. "Plaintiffs" means the United States and the MDEQ.
19	RR. "Process Piping" means piping: (a) used to convey hydrocarbons or
20	fractions thereof at a petroleum refinery from one piece of process equipment to another piece of
21	process equipment; (b) designated "pipe," "piping," or "pipe fitting" in applicable material
22	specifications; and (c) for which CUSA conducts inspections consistent with API 570.
23	SS. "Process Unit" means an individual manufacturing unit within a petroleun
24	refinery where crude oil or crude oil fractions are distilled, refined, or processed through physical
25	(temperature and pressure) and/or chemical processes.
26	TT. "Richmond Refinery" means the petroleum refinery located in Richmond
27	California that CUSA owns and operates.
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1	UU. "Risk Management Program" or "RMP" means the Chemical Accident
2	Preparedness and Prevention Program described in regulations promulgated at 40 C.F.R. Part 68.
3	VV. "Safe Operating Limit" or "SOL" means an IOW set to monitor conditions
4	that could result in rapid degradation of equipment integrity potentially leading to an imminent
5	loss-of-containment event. A deviation outside an established SOL limit will trigger: (a) a
6	control-room alarm for measurements that are electronically transmitted to the distributed control
7	system that requires a predetermined operator response within a short, specified time frame; and
8	(b) e-mail alerts sent automatically to select CUSA personnel. A SOL is based on a "Critical"
9	limit as described in API Recommended Practice 584 (1st ed., May 2014).
10	WW. "Salt Lake City Refinery" means the petroleum refinery located in North
11	Salt Lake City, Utah that CUSA owns and operates.
12	XX. "Scoping Report" means the report described in Paragraph 31.
13	YY. "Section" means a portion of this Consent Decree identified by a Roman
14	numeral.
15	ZZ. "SME" means Subject Matter Expert, a person who has in-depth
16	knowledge and experience on a specific technical area or subject.
17	AAA. "Technical Authority Council" means the entity described in Paragraph
18	17.a.
19	BBB. "Technical Authority Process" means the process described in Paragraphs
20	16 and 17.
21	CCC. "Turnaround" means a planned total shutdown of a Process Unit or
22	Process Units to perform maintenance including overhaul, repair and testing of Process Piping
23	and equipment. "Turnaround" does not include shutdowns performed solely for the purpose of
24	inspections, catalyst changes, regeneration or other non-maintenance activities.
25	DDD. "United States" means the United States of America, acting on behalf of
26	EPA.
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V. <u>CIVIL PENALTY</u>

7. Within thirty (30) Days after the Effective Date, CUSA will pay the sum of \$2,492,750 to the United States, and the sum of \$457,250 to the MDEQ, as a civil penalty, together with interest accruing from the date on which the Consent Decree is lodged with the Court, at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.

8. **Federal Payment Instructions**.

a. CUSA will pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account, in accordance with instructions provided to CUSA by the Financial Litigation Unit ("FLU") of the United States Attorney's Office for the Northern District of California after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which CUSA will use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Timm A. Miller Senior Counsel—Litigation Management Group Chevron Products Company (a Chevron U.S.A. Inc. division) 6001 Bollinger Canyon Road, Building T-2172 San Ramon, California 94583-2324 (925) 842-5108

on behalf of CUSA. CUSA 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 XXIII (Notices).

timm.miller@chevron.com

b. At the time of payment, CUSA will send notice that payment has been made: (a) to EPA via e-mail at cinwd_acctsreceivable@epa.gov or via regular mail at EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; and (b) to the United States via e-mail or regular mail in accordance with Section XXIII (Notices). Such notice will state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States and State of Mississippi vs. Chevron U.S.A. Inc.* and will reference the civil action number, CDCS Number and Department of Justice case number 90-5-2-1-11576.

CUSA to obtain a federal, state, or local permit or approval, CUSA will submit timely and

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Permits. Where any compliance obligation under this Consent Decree requires

1	complete applications and take all other reasonable actions necessary to obtain all such permits
2	or approvals. CUSA may seek relief under the provisions of Section XVII (Force Majeure) for
3	any delay in the performance of any such obligation resulting from a failure to obtain, or a delay
4	in obtaining, any permit or approval required to fulfill such obligation, if CUSA has submitted
5	timely and complete applications and has taken all other reasonable lawful actions necessary to
6	obtain all such permits or approvals.
7	VII. TECHNICAL AUTHORITY PROCESS – CONSENT DECREE COMPLIANCE
8	REQUIREMENTS
9	16. CUSA will maintain a Technical Authority Process designed to enhance process
10	safety at the Covered Refineries through the development of Manufacturing TA Directives.
11	CUSA personnel with process safety and operational experience will administer the Technical

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- Authority Process, which will serve as the centralized clearinghouse for the review, analysis and development of Manufacturing TA Directives, based on internal and external sources generated after the Effective Date including, but not limited to: (a) ETC advisories; (b) refining industry standards, recommended practices, and guidance; (c) refining industry best practices; (d) incident(s) at the Covered Refineries; and (e) the Pilot Study Report. Items (a) through (e) are hereinafter collectively referred to as "Advisories."
 - 17. The Technical Authority Process will include the following elements:
- Technical Authority Council. CUSA will create a Technical Authority a. Council that will have the sole authority and discretion to designate which Advisories will be developed into Manufacturing TA Directives, including the scope and implementation methods of each Manufacturing TA Directive and its priority and timing for implementation.
- b. Development of Manufacturing TA Directives. SMEs will be designated to review Advisories and, in turn, present fatality and/or High-Consequence Loss-of Containment Incident prevention topics to the Technical Authority Council to determine the need for and development of new Manufacturing TA Directives. Topics presented to the Technical Authority Council for consideration for new Manufacturing TA Directives will be maintained in a centralized database.

1	(1) All affected employees at the Covered Refineries will have
2	reasonable access to all Manufacturing TA Directives via electronic means.
3	(2) Manufacturing TA Directives issued on or after the Effective Date
4	will include, at a minimum, the following elements:
5	(a) <u>Continuous Improvement</u> : Within five (5) years after
6	issuing a Manufacturing TA Directive, the Technical Authority Council will review and revise
7	the Manufacturing TA Directive, as necessary, with the goal of keeping the Manufacturing TA
8	Directive current, relevant and effective, including the consideration of developments associated
9	with the topic addressed by the Manufacturing TA Directive.
10	(b) <u>Verification and Validation</u> : For project-based
11	Manufacturing TA Directives, verification and validation will be conducted both during and at
12	the end of the project to verify proper implementation. For process-based Manufacturing TA
13	Directives, verification and validation will be conducted to verify the proper implementation of
14	the ongoing process.
15	(c) <u>Implementation Schedule:</u> Each Manufacturing TA
16	Directive will include an effective date, and project-based Manufacturing TA Directives will be
17	accompanied by an implementation deadline for the work described in the Manufacturing TA
18	Directive.
19	c. <u>Implementation of Manufacturing TA Directives</u> . If the Technical
20	Authority Council approves the topic for the development of a new Manufacturing TA Directive,
21	a new Manufacturing TA Directive will be drafted. After the Technical Authority Council
22	reviews and approves the content of the draft, a final Manufacturing TA Directive will be issued
23	and each Covered Refinery will be responsible for implementation. Where appropriate, the
24	Technical Authority Council will request input from SMEs in the development of the new
25	Manufacturing TA Directive.
26	d. <u>Written Approvals for Deviations</u> . Any substantive deviation from a
27	Manufacturing TA Directive including, but not limited to, any implementation deadlines set by
28	the Technical Authority Council, must be approved in writing by the senior CUSA manager with

1	responsibility over the operation of all of the Covered Refineries (currently the "President of
2	CUSA Manufacturing"), or his or her delegate.
3	e. <u>Tracking and Implementation Review</u> . CUSA will track the status of
4	implementation of the new Manufacturing TA Directive.
5	f. <u>Reporting of Modifications of Manufacturing TA Directives</u> . CUSA will
6	not remove any of the following Manufacturing TA Directives without sixty (60) Days prior
7	written notification to EPA, and CUSA will provide notice to EPA within thirty (30) Days of any
8	substantive modification requiring review and approval by the Technical Authority Council of
9	any of the following Manufacturing TA Directives:
10	(1) MFG 205 (Leak Response Protocol Instruction), current version
11	dated June 2015;
12	(2) MFG 210 (Fired Equipment Operation), current version dated May
13	2016;
14	(3) MFG 325 (Hazard and Operability and Layers of Protection
15	Analysis), current version dated December 2016;
16	(4) MFG 520 (Damage Mechanism Review), current version dated
17	August 2015;
18	(5) MFG 525 (Fixed Equipment Asset Strategies), current version
19	dated September 2018;
20	(6) MFG 530 (Fixed Equipment Integrity Threat Recommendation and
21	Resolution), current version dated December 2017; and
22	(7) MFG 535 (Sulfidation Inspection Project), current version dated
23	September 2016.
24	18. CUSA will provide EPA with progress reports describing the functioning of the
25	Technical Authority Process by providing information which summarizes the following:
26	(a) topics considered by the Technical Authority Council that are maintained in a centralized
27	database as set forth above in Paragraph 17.b; (b) Manufacturing TA Directives developed in the
28	Technical Authority Process; and (c) the status of implementation of the Manufacturing TA

Minimum Required Thickness before the next Turnaround for that Process Unit that is scheduled

determinations, CS Piping Components inspected pursuant to Paragraph 20 that, after the

to take place following the date of the Sulfidation Corrosion Inspection;

Effective Date, are at or below Minimum Required Thickness, or predicted to be at or below

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IX. <u>CARBON STEEL PIPING REPLACEMENT – CONSENT DECREE</u> <u>COMPLIANCE REQUIREMENTS</u>

- 25. No later than December 31, 2028, CUSA must replace designated CS Process Piping identified in Appendix C by Covered Refinery, Process Unit and Inspection Isometric Number, and which is highlighted in the inspection isometrics referenced in Appendix C, with Chrome-Alloy steel selected by CUSA SMEs. CUSA must replace only the CS Process Piping that is highlighted in the inspection isometrics referenced in Appendix C and is not required to replace any other piping or equipment that may also be depicted.
- 26. For each Covered Refinery, CUSA must submit to EPA in accordance with the reporting requirements contained in Section XV the information pertaining to implementation of Paragraph 25 in the form attached as Appendix D, including the date when the CS Process Piping identified for replacement in each inspection isometric has been completed, and the material selected.
- 27. Compliance with the requirements of this Carbon Steel Piping Replacement term (Paragraphs 25-26) will be complete when CUSA has completed the replacement of CS Process Piping required by Paragraph 25, after which CUSA may submit a Completion Report pursuant to Paragraphs 11-14 of this Consent Decree.

X. <u>FIRED HEATER PILOT STUDY – CONSENT DECREE COMPLIANCE REQUIREMENTS</u>

- 28. CUSA will conduct a Pilot Study of the following automated controls ("Pilot Study Controls") intended to reduce bogging events in fired heaters: (a) low O₂ override to prevent fuel gas increase; and (b) fuel gas controller output rate-of-change limit to prevent large increases of fuel gas.
- 29. In connection with this Pilot Study, CUSA will install not less than five (5) low O₂ overrides, and not less than five (5) fuel gas controller output rate-of-change limits on fired heaters to be selected and identified by CUSA at one or more of the Covered Refineries. CUSA will design, install and configure at least one (1) low O₂ override and one (1) fuel gas controller output rate-of-change limit on a fired heater(s) at the Pascagoula Refinery. Each of the fired heaters to be equipped with Pilot Study Controls as part of this Pilot Study will be located at a

- 30. No later than twelve (12) months after the Effective Date, CUSA will commence the Pilot Study. The duration of the Pilot Study will be at least twelve (12) months, which will begin upon installation of the last of the Pilot Study Controls to be included in the Pilot Study, but will not exceed five (5) years.
- 31. Prior to commencement of the Pilot Study and within six (6) months of the Effective Date, CUSA will provide EPA and the MDEQ with a report which indicates the planned scope of the Pilot Study, its anticipated duration, criteria expected to be evaluated as part of the Pilot Study, and the qualifications of the SMEs to be involved ("Scoping Report"). However, CUSA will have sole discretion to change these aspects of the Pilot Study, either before or during the study period, provided that such changes are consistent with the obligations set forth above in Paragraphs 28-30. In the event CUSA determines changes to these aspects of the Pilot Study are warranted, it will provide written notice within thirty (30) Days after such determination to EPA and the MDEQ indicating the changes made to the initial Scoping Report.
- 32. At the conclusion of the Pilot Study, an analysis will be prepared by SMEs selected by CUSA and will be contained in a written report ("Pilot Study Report"). The Pilot Study Report will be provided to EPA and the MDEQ within twelve (12) months after the conclusion of the study period and will include the location of the fired heaters and type(s) of Pilot Study Controls installed on each, the identification (including names, titles, and brief description of qualifications) of SMEs who prepared the Pilot Study Report, an analysis of data collected as part of the Pilot Study, as well as conclusions derived from such analysis. CUSA may, at its sole discretion, identify and include in the Pilot Study Report an analysis of additional fired heaters installed with low O₂ overrides and/or fuel gas controllers at the Covered Refineries.

1	33. All documentation provided to EPA and the MDEQ in connection with this
2	Section X including, but not limited to, the Scoping Report and Pilot Study Report, may be
3	submitted as Confidential Business Information under federal law and/or "trade secrets" under
4	state law and, if submitted as such, will be reviewed and handled by EPA subject to 40 C.F.R.
5	Part 2 and by the MDEQ subject to Miss. Code Ann. Section 49-17-39.
6	34. Compliance with the requirements of this Fired Heater Pilot Study term
7	(Paragraphs 28-32) will be complete when CUSA has provided EPA and the MDEQ with the
8	Pilot Study Report described above in Paragraph 32, after which CUSA may submit a
9	Completion Report pursuant to Paragraphs 11-14 of this Consent Decree.
10	XI. INTEGRITY OPERATING WINDOWS (IOW) — CONSENT DECREE
11	COMPLIANCE REQUIREMENTS
12	35. No later than twelve (12) months after the Effective Date, CUSA must establish a
13	written IOW work process for the Covered Refineries. The written IOW work process will
14	describe minimum requirements for establishing and implementing IOWs for Process Units.
15	36. The written IOW work process will be generally based upon API Recommended
16	Practice 584 (1st ed., May 2014).
17	37. The written IOW work process will describe how the following tasks will be
18	performed specific to the Process Units listed in Appendix E:
19	a. Review of design and operational data;
20	b. Identify and select Damage Mechanisms for which IOWs will be
21	considered;
22	c. For the Damage Mechanisms selected pursuant to Paragraph 37.b, identify
23	and select specific chemical and/or physical process variables that affect those Damage
24	Mechanisms and for which IOWs will be developed;
25	d. For each specific chemical and/or physical process variable selected
26	pursuant to Paragraph 37.c, develop an IOW by: (1) determining the upper and/or lower IOW
27	limits for each such process variable; and (2) designating an IOW level (e.g., SOL, IOW-1,
28	IOW-2, or IIL);

41. Compliance with the requirements of this IOW term (Paragraphs 35-38) will be complete when: (a) the written IOW work process is established, including the development of pre-determined actions to be taken by Console Operators in response to deviations outside established limit(s) for SOLs; (b) an IOW is configured for each Process Unit identified in Appendix E pursuant to Paragraph 37.e; (c) the systems to provide automatic e-mail alerts and alarms pursuant to Paragraphs 37.f and 37.g are operational; (d) one-time training has been completed pursuant to Paragraph 37.h; and (e) CUSA has provided written notice to EPA that the tasks enumerated in Paragraph 41(a)-(d) have been completed at the Covered Refineries. After completion of the tasks enumerated in Paragraph 41(a)-(e) above, but not earlier than twelve (12) months after providing EPA notice pursuant to Paragraph 41(e), CUSA may submit a Completion Report pursuant to Paragraphs 11-14 of this Consent Decree.

XII. <u>FITNESS-FOR-SERVICE TRAINING — CONSENT DECREE COMPLIANCE REQUIREMENTS</u>

- 42. No later than twelve (12) months after the Effective Date, CUSA will have in place a Fitness-For-Service, Level 1 Assessment Training Program ("FFS Training Program") for the Covered Refineries. Level 1 Assessments are described in API 579-1/ASME FFS-1, Part 2 (3rd ed., June 2016).
- 43. The FFS Training Program must be based upon API 579-1/ASME FFS-1, Parts 4 (General Metal Loss), 5 (Local Metal Loss), 6 (Pitting Corrosion), 7 (Hydrogen Blister and Hydrogen Induced Cracking Damage), 9 (Crack-Like Flaws), 12 (Dents, Gouges, and Dent-Gouge Combinations), and 13 (Laminations). The FFS Training Program must be designed to enhance proficiency in assessing damage to and evaluating the structural integrity of in-service Process Piping. The FFS Training Program must provide training on processes and techniques for assessing identified damage in Process Piping at the Covered Refineries to CUSA personnel responsible for making such Level 1 Assessments, and on the use of software used in completing Level 1 Assessments. The FFS Training Program must include an optional examination to demonstrate proficiency in conducting Level 1 Assessments.

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The titles of CUSA Covered Refinery personnel who take the proficiency examination for conducting Level 1 Assessments on each date of administration.

The information set forth in Paragraph 45 will be provided on the form attached

as Appendix F. 23

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47. Compliance with the requirements of this FFS Training Program term (Paragraphs 42-45) will be complete upon submission of the information required by Paragraph 45, after which CUSA may submit a Completion Report pursuant to Paragraphs 11-14 of this Consent Decree.

XIII. EMERGENCY RESPONSE TRAINING — CONSENT DECREE COMPLIANCE REQUIREMENTS

- 48. No later than twelve (12) months after the Effective Date, CUSA will complete emergency response training ("ER Training") at each of the Covered Refineries, which will consist of two training modules, as follows:
- a. <u>Leak-Response Training</u>. This ER Training module will be based on CUSA's Manufacturing Leak Response Protocol Instruction (MFG 205) and include guidance on the type of information necessary to (1) evaluate leaks, including the physical and chemical characteristics of the leaking material, and (2) determine actions to be taken in response to the evaluation, including whether to shut down, modify or continue operation. This ER Training module will be provided to CUSA Incident Commanders, CUSA First Responders, CUSA operations supervisors and CUSA operators at each of the Covered Refineries.
- b. <u>Hazardous Materials Incident Command Training</u>. This ER Training module will include guidance for setting up incident-command structures, and establishing boundary limits and exclusion zones. This ER Training module will be provided to CUSA Incident Commanders and CUSA First Responders at each of the Covered Refineries by Texas A&M University or a National Fire Protection Association-accredited provider.
- 49. No later than ninety (90) Days after the Effective Date, CUSA will add leak-response training referenced above in Paragraph 48.a to the training otherwise required for CUSA Incident Commanders, CUSA First Responders, CUSA operations supervisors and CUSA operators at each Covered Refinery. No later than ninety (90) Days after the Effective Date, CUSA will add hazardous materials incident command training referenced above in Paragraph 48.b to the training otherwise required for CUSA Incident Commanders and CUSA First Responders at each Covered Refinery.
- 50. For each Covered Refinery, in accordance with the reporting requirements contained in Section XV, CUSA will submit to EPA no later than twelve (12) months after the Effective Date:
- a. A copy of the written training materials for each module of the ER Training Program;

1	b. The date(s) each ER Training module was provided; and
2	c. The titles and employment locations of CUSA personnel who attended
3	each module of the ER Training.
4	51. The information set forth in Paragraphs 50.b and 50.c will be provided on the
5	form attached as Appendix G.
6	52. Compliance with the requirements of this ER Training term (Paragraphs 48-50)
7	will be complete upon submission of the information required by Paragraph 50, after which
8	CUSA may submit a Completion Report pursuant to Paragraphs 11-14 of this Consent Decree.
9	XIV. SUPPLEMENTAL ENVIRONMENTAL PROJECT
10	53. CUSA must implement a Supplemental Environmental Project ("SEP"), Purchase
11	of Emergency Response Equipment, in accordance with all provisions of and the schedule set
12	forth in Appendix H.
13	54. The SEP will provide the emergency response equipment specified in Appendix
14	H to the identified emergency response organizations to assist them in responding to
15	emergencies in the communities where the Covered Refineries and the Kapolei Refinery operate
16	and where chemical processes are undertaken which are regulated by the CAA. CUSA is
17	obligated to expend Ten Million Dollars (\$10,000,000), which includes all administrative costs
18	associated with implementing the SEP, and costs incurred by contractors and other third-parties
19	selected by CUSA to develop, implement, maintain and administer the SEP.
20	55. CUSA is responsible for the satisfactory completion of the SEP in accordance
21	with the requirements of this Consent Decree. "Satisfactory completion" means completing the
22	SEP in accordance with the requirements and schedules set forth in Appendix H. CUSA may
23	use contractors or consultants in planning and implementing the SEP.
24	56. With regard to the SEP, CUSA certifies the truth and accuracy of each of the
25	following:
26	a. All cost information provided to EPA in connection with EPA's approval
27	of the SEP is complete and accurate, and that CUSA in good faith estimates that the cost to
28	implement the SEP is Ten Million Dollars (\$10,000,000);

1	b. As of the date of executing this Consent Decree, CUSA is not required to
2	perform or develop the SEP by any federal, state, or local law or regulation and is not required to
3	perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other
4	action in any forum;
5	c. The SEP is not a project that CUSA was planning or intending to
6	construct, perform, or implement other than in settlement of the claims resolved in this Consent
7	Decree;
8	d. CUSA has not received and will not receive credit for the SEP in any other
9	enforcement action;
10	e. CUSA will not receive any reimbursement for any portion of the SEP
11	from any other person; and
12	f. (1) CUSA is not a party to any open federal financial assistance
13	transaction that is funding or could fund the same activity as the SEP described in this Section;
14	and (2) CUSA has inquired of the SEP recipient(s) and/or SEP implementer(s) whether any are a
15	party to an open federal financial assistance transaction that is funding or could fund the same
16	activity as the SEP and has been informed by the recipient(s) and/or the implementer(s) that none
17	are a party to such a transaction. For purposes of these certifications, the term "open federal
18	financial assistance transaction" refers to a grant, cooperative agreement, loan, federally-
19	guaranteed loan guarantee, or other mechanism for providing federal financial assistance whose
20	performance period has not yet expired.
21	57. Within thirty (30) Days after completion of the SEP, CUSA will submit a
22	Completion Report to the United States and MDEQ, in accordance with Section XXIII (Notices).
23	The Completion Report will contain the following information:
24	a. A detailed description of the SEP as implemented;
25	b. A description of any material problems encountered in completing the
26	SEP and the solutions thereto;
27	c. An itemized list of all eligible SEP costs expended;

1	64. If CUSA's purchase of the emergency response equipment identified in Appendix
2	H does not expend the full amount set forth in Paragraph 54, and if EPA determines that the
3	amount remaining reasonably could be applied toward the purchase of additional emergency
4	response equipment, CUSA will identify, purchase and provide additional emergency response
5	equipment to one or more of the emergency response organizations identified in Appendix H.
6	XV. <u>REPORTING REQUIREMENTS</u>
7	65. CUSA will submit the following reports and submittals to EPA and, unless
8	otherwise specified in this Consent Decree, to the MDEQ:
9	a. <u>Annual Reports</u> . Each year, on the anniversary date of the Effective Date,
10	until termination of this Consent Decree pursuant to Section XXVII, CUSA will submit an
11	annual report for the twelve (12) month period ending two (2) months prior to the anniversary of
12	the Effective Date, which report will include the components described below. The Parties
13	recognize and acknowledge that the reporting period of the first Annual Report will be ten (10)
14	months. Except as provided in Paragraph 77(b), each Annual Report will include the following
15	components: (a) updated versions of the reporting forms provided in Appendices A, B, D and E;
16	(b) a description of any problems CUSA encounters during the reporting period that are likely to
17	cause a delay in compliance with Section VII (Paragraphs 16-18), Section VIII (Paragraphs 20,

50) of this Consent Decree, together with implemented or proposed solutions; and (c) a description of any non-compliance with the requirements of Section VII (Paragraphs 16-18),

21 and 22.a-22.c), Section IX (Paragraphs 25-26), Section X (Paragraphs 28-32), Section XI

(Paragraphs 35, 37 and 38), Section XII (Paragraph 42-45), and/or Section XIII (Paragraphs 48-

- Section VIII (Paragraphs 20, 21 and 22.a-22.c), Section IX (Paragraphs 25-26), Section X
- 23 (Paragraphs 28-32), Section XI (Paragraphs 35, 37 and 38), Section XII (Paragraphs 42-45),
- 24 and/or Section XIII (Paragraphs 48-50) of this Consent Decree identified by CUSA during the
- 25 reporting period, together with implemented or proposed solutions.

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b. <u>Reduction of Annual Reporting Requirements</u>. Notwithstanding Paragraph 65.a, CUSA will no longer be required to report the status of any individual settlement term in annual progress reports when the requirements of that individual settlement term within

1	Sections VII-XIV have been completed and a Completion Report has been submitted and
2	approved for that individual settlement term, as specified in the last paragraph of each of
3	Sections VII-XIII and in Paragraph 57 of Section XIV, and in accordance with Paragraphs 11-14.
4	c. <u>One-Time Submittals</u> . The following submittals will have the content and
5	due dates described in the referenced Paragraphs:
6	(1) The Scoping Report for the Fired Heater Pilot Study described in
7	Paragraph 31;
8	(2) The Pilot Study Report described in Paragraph 32;
9	(3) The FFS Training Program materials described in Paragraph 45.a;
10	(4) The ER Training materials described in Paragraph 50.a; and
11	(5) The Completion Report for the Purchase of Emergency Response
12	Equipment SEP described in Paragraph 57.
13	66. CUSA will notify EPA (and, if such threat pertains to the area in or around the
14	Pascagoula Refinery, the MDEQ) whenever: (a) any non-compliance with this Consent
15	Decree may pose an imminent and substantial endangerment to the public health or welfare or
16	the environment; or (b) any other event's impact on CUSA's performance under this Consent
17	Decree may pose an imminent and substantial endangerment to the public health or welfare or
18	the environment. Notice will be oral or by electronic transmission within three (3) Days after
19	CUSA first knew of the non-compliance or event.
20	67. All reports will be submitted to the persons designated in Section XXIII
21	(Notices).
22	68. Each report submitted by CUSA under this Section will be signed by an
23	authorized representative(s) of the submitting Party and include the following certification:
24	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a practice
25	designed to assure that qualified personnel properly gather and evaluate the
26	information submitted. Based on my inquiry of the person or persons responsible for gathering the information, the information submitted is, to the best of my
27	knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and
28	complete. I am aware that there are significant penalties for submitting false

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27 28 information, including the possibility of fine and imprisonment for knowing violations.

- 69. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.
- 70. The reporting requirements of this Consent Decree do not relieve CUSA of any reporting obligations required by any federal, state, or local law, regulation, permit, or other requirement.
- 71. 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.

XVI. STIPULATED PENALTIES

- 72. CUSA will be liable for stipulated penalties to the United States, and where the violation is specific to the Pascagoula Refinery, the MDEQ, for violations of the terms of this Consent Decree as specified below, and such penalties will be payable upon demand consistent with Paragraph 79, unless excused under Section XVII (Force Majeure) or as otherwise resolved by Section XVIII (Dispute Resolution). Stipulated Penalties will apply to the failure to perform any obligation referenced below in Paragraphs 73-76, according to all applicable requirements of this Consent Decree and within the specified time schedules established by or approved under this Consent Decree. No stipulated penalties will attach to circumstances involving minor corrections or revisions to data or information previously reported and subject to the Reporting Requirements in Section XV. Minor corrections or revisions include, but are not limited to, the following:
- Corrections or revisions resulting from an ongoing effort to update a. Inspection Isometrics at the Covered Refineries (for example, redrawing or renumbering Inspection Isometrics depicting piping circuits or equipment);
- b. Corrections or revisions to dates reported in updated Appendices, provided that both the initial reported date and the corrected or revised date fall within the period for compliance with the Section corresponding to the Appendix in which the dates were reported;

1		c. Any	good faith miscaicula	ition of interest on any payment due under the
2	terms of this Consent Decree; and			
3		d. Scrivener's errors or transpositions of digits of data.		
4	73. Late Payment of Civil Penalty. If CUSA fails to pay the civil penalty required			
5	to be paid un	to be paid under Section V (Civil Penalty) according to the terms and conditions set forth in that		
6	Section, CUS	A will pay a	stipulated penalty of \$	2,500 per Day for each Day the payment is late.
7	74.	Compliance	ce Milestones.	
8		a. The	following stipulated p	penalties will accrue per violation per Day for
9	each violation	n of the comp	oliance obligations idea	ntified in Paragraph 74.b:
10		Penalty Per	Violation Per Day	Period of Noncompliance
11		\$1,000		1st through 30th Day
12		\$2,000		31st Day through 60th Day
13		\$5,000		61st Day and beyond
14		b. Cor	npliance obligations in	this Consent Decree subject to Paragraph 74.a
15	are:			
16		(1)	Maintain a Technic	cal Authority Process as described in Paragraph
17	16 for five (5) years;		
18		(2)	Complete the Sulfi	dation Corrosion Inspections described in
19	Paragraph 20	•		
20		(3)	Replace designated	d CS Process Piping as described in Paragraph
21	25;			
22		(4)	Commence a Fired	Heater Pilot Study as described in Paragraph
23	30;			
24		(5)	Complete a Fired I	Heater Pilot Study as described in Paragraph 32;
25		(6)	Establish a written	IOW work process for the Covered Refineries
26	as described i	in Paragraph	35;	
27		(7)	Maintain IOWs as	described in Paragraphs 41(b) and (c) for twelve
28	(12) months a	after providin	g notice to EPA as req	uired by Paragraph 41(e);

1	(8)	Develop and conduct	Develop and conduct one-time IOW training for Console		
2	Operators at each Covered Refinery as described in Paragraph 37.h.;				
3	(9)	Supplement the requi	Supplement the required training for Console Operators to include		
4	IOW training as described	l in Paragraph 38;			
5	(10)	Commence impleme	ntation of a FFS Training Program as		
6	described in Paragraph 42	;			
7	(11)	Add to CUSA's design	gn engineering onboarding process a		
8	document entitled "Fitnes	s-For-Service Level 1 Ap	prover Qualification Process" which sets		
9	forth the requirement that	CUSA personnel approv	ring Level 1 Assessments for the Covered		
10	Refineries must have pass	ed the optional examinat	on described in Paragraph 44;		
11	(12)	Complete the ER train	ning at each of the Covered Refineries as		
12	described in Paragraph 48	; and			
13	(13) Add the leak-response training and the hazardous materials				
14	incident command training to the appropriate training requirements as described in Paragraph 49.				
	75. Reporting Requirements . The following stipulated penalties will accrue per				
15	75. Reporting	Requirements . The following	owing stipulated penalties will accrue per		
15 16			owing stipulated penalties will accrue per g requirements of Section XV:		
	violation per Day for each				
16	violation per Day for each	violation of the reporting	g requirements of Section XV:		
16 17	violation per Day for each Penalty Penalty	violation of the reporting	g requirements of Section XV: Period of Noncompliance		
16 17 18	violation per Day for each Penalty Per \$300	violation of the reporting Violation Per Day	Period of Noncompliance 1st through 30th Day		
16 17 18 19	violation per Day for each Penalty Per \$300 \$1,000 76. SEP Requ	violation of the reporting Violation Per Day	Period of Noncompliance 1st through 30th Day		
16 17 18 19 20	violation per Day for each Penalty Per \$300 \$1,000 76. SEP Requ a. Fail	violation of the reporting r Violation Per Day irements. lure to Complete the SEP	Period of Noncompliance 1st through 30th Day 31st Day and beyond		
16 17 18 19 20 21	violation per Day for each Penalty Per \$300 \$1,000 76. SEP Requ a. Fail	violation of the reporting Violation Per Day irements lure to Complete the SEP orth in Appendix H, CUS	Period of Noncompliance 1st through 30th Day 31st Day and beyond If CUSA fails to satisfactorily complete the A must pay stipulated penalties for each Day		
16 17 18 19 20 21 22	violation per Day for each Penalty Per \$300 \$1,000 76. SEP Requ a. Fail SEP by the deadline set for which it fails to satisfat	violation of the reporting Violation Per Day irements lure to Complete the SEP orth in Appendix H, CUS	Period of Noncompliance 1st through 30th Day 31st Day and beyond If CUSA fails to satisfactorily complete the A must pay stipulated penalties for each Day		
16 17 18 19 20 21 22 23	violation per Day for each Penalty Per \$300 \$1,000 76. SEP Requ a. Fail SEP by the deadline set for which it fails to satisfat	iviolation of the reporting Violation Per Day irements lure to Complete the SEP orth in Appendix H, CUS actorily complete the SEP	g requirements of Section XV: Period of Noncompliance 1st through 30th Day 31st Day and beyond If CUSA fails to satisfactorily complete the A must pay stipulated penalties for each Day as follows:		
16 17 18 19 20 21 22 23 24	violation per Day for each Penalty Per \$300 \$1,000 76. SEP Requ a. Fail SEP by the deadline set for which it fails to satisfate Penalty Per	iviolation of the reporting Violation Per Day irements lure to Complete the SEP orth in Appendix H, CUS actorily complete the SEP	Period of Noncompliance 1st through 30th Day 31st Day and beyond If CUSA fails to satisfactorily complete the A must pay stipulated penalties for each Day as follows: Period of Noncompliance		
16 17 18 19 20 21 22 23 24 25	violation per Day for each Penalty Per \$300 \$1,000 76. SEP Requ a. Fail SEP by the deadline set for which it fails to satisfate Penalty Per \$500	iviolation of the reporting Violation Per Day irements lure to Complete the SEP orth in Appendix H, CUS actorily complete the SEP	Period of Noncompliance 1st through 30th Day 31st Day and beyond If CUSA fails to satisfactorily complete the A must pay stipulated penalties for each Day as follows: Period of Noncompliance 1st through 30th Day		

1	b. <u>Failure to Submit the Completion Report Under Paragraph 57</u> . The			
2	following stipulated penalties will accrue per Day for each failure to submit the Completion			
3	Report in accordance with Section XIV (Paragraph 57):			
4	Penalty Per Violation Per Day Period of Noncompliance			
5	\$300 1st through 30th Day			
6	\$1,000 31st Day and beyond			
7	77. <u>Cessation of Certain Obligations Upon Approval of Completion Reports.</u>			
8	When a Completion Report has been approved in accordance with Paragraphs 11-14:			
9	a. No further demand for payment of stipulated penalties may be made for			
10	alleged failures to comply with the requirements of the Section for which the Completion Repor			
11	has been approved, unless EPA finds that CUSA's Completion Report contained material			
12	misstatements or omissions as described in Paragraph 77.c.			
13	b. CUSA's reporting obligations associated with the Section for which the			
14	Completion Report has been approved will terminate, unless EPA finds material misstatements			
15	or omissions as described in Paragraph 77.c.			
16	c. If EPA finds that CUSA's Completion Report contained material			
17	misstatements or omissions, EPA will so notify CUSA in writing and describe the nature of its			
18	concerns. CUSA will have sixty (60) Days to cure such concerns, during which time EPA may			
19	not demand stipulated penalties for any non-willful material misstatements or omissions.			
20	d. If the Parties are unable to resolve a dispute regarding whether CUSA's			
21	Completion Report contained material misstatements or omissions informally, CUSA may			
22	invoke the Dispute Resolution process set forth in Section XVIII.			
23	e. Scriveners' errors and transpositions of digits of data will not be			
24	considered material misstatements or omissions, although CUSA will submit corrections when			
25	such errors are discovered.			
26	78. Stipulated penalties under this Section will begin to accrue on the Day a violation			
27	occurs and will continue to accrue until performance is completed or the violation ceases.			
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- The Section XVIII (Dispute Resolution), CUSA will pay stipulated penalties to the United States, and the MDEQ, if applicable, upon demand, within sixty (60) Days of receiving the written demand by either Plaintiff. Any demand for stipulated penalties must be provided by EPA or the MDEQ in writing to CUSA. The demand for payment of stipulated penalties must specifically identify the violation and the grounds upon which the demand is based. For any demand made by both Plaintiffs, the Plaintiffs will specify in the demand letter what amount of the stipulated penalty is due to the United States and what amount of the stipulated penalty is due to the MDEQ. If only one Plaintiff is making a demand for payment of a stipulated penalty, it will simultaneously send a copy of the demand to the other Plaintiff.
- 80. Either Plaintiff may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.
- 81. Stipulated penalties will continue to accrue as provided in Paragraph 78, during any Dispute Resolution, but need not be paid until the following:
- a. If the dispute is resolved by agreement, CUSA will pay accrued penalties determined to be owing, together with interest, to the United States or the MDEQ within thirty (30) Days of the effective date of the agreement.
- b. If the dispute is resolved by a written summary of position described in Paragraph 92 (Informal Dispute Resolution), and CUSA does not invoke formal dispute resolution, CUSA will pay accrued penalties determined to be owing, together with interest, to the United States or the MDEQ within seventy-five (75) Days of receipt of the written summary of position.
- c. If the dispute is resolved by a Statement of Position described in Paragraph 94 (Formal Dispute Resolution), and CUSA does not seek judicial review, CUSA will pay accrued penalties determined to be owing, together with interest, to the United States or the MDEQ within sixty (60) Days of receipt of the Statement of Position.
- d. If the dispute is appealed to the Court and the United States or the MDEQ prevails in whole or in part, CUSA will pay all accrued penalties determined by the Court to be

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owing, together with interest, within sixty (60) Days of receiving the Court's decision or order, except as provided in Paragraph 81.e, below.

- If any Party appeals the District Court's decision, CUSA will pay all e. accrued penalties determined to be owing, together with interest, within fifteen (15) Days of receiving the final appellate court decision.
- 82. CUSA will pay stipulated penalties owing to the United States in the manner set forth in Paragraph 8 and with the confirmation notices required by Paragraph 119, except that the transmittal letter will state that the payment is for stipulated penalties and will state for which violation(s) the penalties are being paid. CUSA will pay stipulated penalties owing to the MDEQ in the manner set forth in Paragraph 9.
- 83. If CUSA fails to pay stipulated penalties according to the terms of this Consent Decree, CUSA will 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 will be construed to limit the United States or the MDEQ from seeking any remedy otherwise provided by law for CUSA's failure to pay any stipulated penalties.
- 84. The payment of penalties and interest, if any, will not alter CUSA's obligation to complete the performance of the requirements of this Consent Decree.
- 85. Non-Exclusivity of Remedy. Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XXI (Effect of Settlement/Reservation of Rights), the United States expressly reserves the right to seek any other relief it deems appropriate for CUSA's violation of this Consent Decree or applicable law, including but not limited to, an action against CUSA for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree will be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

XVII. FORCE MAJEURE

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86. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of CUSA, of any entity controlled by CUSA, or of CUSA's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite CUSA's best efforts to fulfill the obligation. The requirement that CUSA 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 potential force majeure, such that the delay and any adverse effects of the delay are minimized. "Force Majeure" does not include CUSA's financial inability to perform any obligation under this Consent Decree.

87. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, as to which CUSA intends to assert a claim of force majeure, CUSA will provide notice orally or by electronic transmission to EPA (and the MDEQ, if the Pascagoula Refinery is affected), within ten (10) Days of when CUSA first knew, or by the exercise of due diligence should have known, that the event would cause a delay. Within thirty (30) Days thereafter, CUSA will provide in writing to EPA, and to the MDEQ where the delay applies to the Pascagoula Refinery, 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; CUSA's rationale for attributing such delay to force majeure; and a statement as to whether, in the opinion of CUSA, the delay in performance of an obligation under this Consent Decree resulting from such event may cause or contribute to an endangerment to public health, welfare, or the environment ("30-Day Force Majeure Notice"). CUSA will include with any 30-Day Force Majeure Notice documentation supporting the claim that the delay was attributable to *force majeure*. Failure to substantially comply with the above requirements will preclude CUSA from asserting any claim of force majeure for that event for the period of time in which CUSA has failed to comply with the notice requirements, and for any additional delay caused by such failure. CUSA will be deemed to know of any circumstances of

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which CUSA, any entity controlled by CUSA, or CUSA's contractors knew or should have known.

- 88. If EPA, after a reasonable opportunity for review and comment by the MDEQ, if applicable, agrees that the delay or anticipated delay is attributable to force majeure, it will notify CUSA in writing, and the time for performance of the obligations under this Consent Decree that are affected by *force majeure* 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 force majeure will not, of itself, extend the time for performance of any other obligation. EPA will notify CUSA in writing of the length of the extension, if any, for performance of the obligations affected by force majeure.
- 89. If EPA, after a reasonable opportunity for review and comment by the MDEQ, if applicable, does not agree that the delay or anticipated delay has been or will be caused by force majeure, EPA will notify CUSA in writing of its decision. If EPA does not provide a response within thirty (30) Days after receipt of CUSA's 30-Day Force Majeure Notice, CUSA may treat the absence of a response as a denial of the 30-Day *Force Majeure* Notice.
- 90. If CUSA elects to invoke the dispute resolution procedures set forth in Section XVIII (Dispute Resolution), it will do so no later than forty-five (45) Days after: (a) receipt of EPA's notice of decision regarding CUSA's force majeure claim; or (b) EPA fails to provide a written response within thirty (30) Days after receipt of CUSA's 30-Day Force Majeure Notice. In any such proceeding, CUSA will have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by force majeure, 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 CUSA complied with the requirements of Paragraphs 86-87. If CUSA carries this burden, the delay at issue will be deemed not to be a violation by CUSA of the affected obligation(s) of this Consent Decree identified to EPA and the Court.

XVIII. <u>DISPUTE RESOLUTION</u>

- 91. Unless otherwise expressly provided for in this Consent Decree, the disputeresolution procedures of this Section will be the exclusive mechanism to resolve disputes related to this Consent Decree. CUSA's failure to seek resolution of a dispute under this Section will preclude CUSA from raising any such issue as a defense to an action by the United States to enforce any obligation of CUSA arising under this Consent Decree, provided that: (a) CUSA had written notice at least twenty (20) Days before such action of the intention of the United States or the MDEQ to seek enforcement of the obligation (e.g., through a demand for stipulated penalties); (b) CUSA had an opportunity to dispute the position of the United States or the MDEQ under this Section; and (c) the notice provided by the United States or the MDEQ was sufficiently clear and precise to inform CUSA of the relevance of the issue.
- 192. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree must first be the subject of informal negotiations, which may include any non-binding alternative-dispute-resolution process agreeable to the United States and CUSA. The dispute will be considered to have arisen when CUSA sends the United States a written Notice of Dispute. Such Notice of Dispute must describe the matter in dispute. The period of informal negotiations will not exceed twenty (20) Days after the United States receives CUSA's Notice of Dispute, unless that period is modified by written agreement. If the United States and CUSA cannot resolve a dispute by informal negotiations, then the United States will provide CUSA with a written summary of its position regarding the dispute. The position advanced in the United States' written summary of its position will be considered binding unless, within forty-five (45) Days after the conclusion of the informal negotiation period, CUSA invokes formal dispute-resolution procedures as set forth below.
- 93. **Formal Dispute Resolution**. CUSA will invoke formal dispute-resolution procedures, within the time period provided in the preceding Paragraph, by providing, pursuant to Section XXIII (Notices), to 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, a

statement of the dispute, CUSA's position, an explanation of that position, and supporting documentation relied upon by CUSA.

- 94. The United States will provide its written Statement of Position to CUSA within forty-five (45) Days of receipt of CUSA's Statement of Position. The United States' Statement of Position must include, but need not be limited to, the United States' position, an explanation of that position, and supporting documentation relied upon by the United States. The United States' Statement of Position will be binding on CUSA, unless CUSA files a motion for judicial review of the dispute in accordance with the following Paragraph.
- 95. CUSA may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XXIII (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within thirty (30) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion must contain a written statement of CUSA's position on the matter in dispute, and supporting factual data, analysis, opinion, or documentation, and set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.
- 96. The United States will respond to CUSA's motion within the time period allowed by the Local Rules of this Court or by court order. CUSA may file a reply memorandum, to the extent permitted by the Local Rules or by court order.
- 97. Any Party to the dispute may appeal the decision of this Court to the United States Court of Appeals for the Ninth Circuit to the extent allowed by law.
- 98. Standard of Review. Except as set forth in Paragraph 127, in a formal dispute resolution proceeding in this Section, CUSA bears the burden of demonstrating that its position complies with this Consent Decree and the CAA, and that it is entitled to relief under applicable principles of law. The United States, on the other hand, reserves the right to argue that its position is reviewable only on the administrative record and must be upheld unless arbitrary and capricious or otherwise not in accordance with law and CUSA reserves the right to argue to the contrary.

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- 101. If CUSA seeks to be relieved of its obligation to ensure that the terms of the Consent Decree are implemented for the Covered Refinery in which CUSA's interest is proposed to be transferred, the following requirements must be met:
- a. At least forty-five (45) Days prior to any such transfer, CUSA will provide a copy of this Consent Decree to the proposed transferee(s) and will provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to the United States and EPA, and if the proposed transfer is of an Operational Interest or Ownership Interest in the Pascagoula Refinery, to the MDEQ, in accordance with Section XXIII of this Consent Decree (Notices).
- b. CUSA will expressly condition any transfer, in whole or in part, of ownership, operation, or other interest (exclusive of any non-controlling, non-operational shareholder or membership interest) in the Covered Refinery, upon the execution by the

transferee of a modification to this Consent Decree. This modification will make the terms and
conditions of this Consent Decree applicable to and binding upon the transferee, and will
substitute the transferee for CUSA as the Party to the Consent Decree that is responsible for
complying with the transferred obligations with respect to the Covered Refinery in which
CUSA's interest was transferred. When a Completion Report has been approved for any of
Sections VII, VIII, IX, X, XI, XII, XIII, and XIV of this Consent Decree, CUSA will not be
required to condition any transfer, in whole or in part, of ownership, operation, or other interest
(exclusive of any non-controlling, non-operational shareholder or membership interest) in the
Covered Refinery upon any such Section for which the Completion Report has been approved.
102. CUSA will send a draft motion and modification of the Consent Decree to
substitute the transferee for CUSA (or alternatively add the transferee as a Party to the Consent
Decree) to the United States, and the MDEQ, if applicable, no later than thirty (30) Days prior to

filing with the Court, that: (a) shows that the transferee has the financial and technical ability to timely comply with all applicable requirements of this Consent Decree; and (b) shows that the modification transfers the applicable obligations and liabilities under the Consent Decree from CUSA to the transferee. If the United States, and the MDEQ, if applicable, approve the proposed modification of the Consent Decree to substitute/add parties, CUSA may file the motion as being uncontested. If the United States, and the MDEQ, if applicable, disapprove of the proposed modification of the Consent Decree to substitute/add parties within thirty (30) Days of receipt, or do not approve or disapprove the proposed modification of the Consent Decree to substitute/add parties within thirty (30) Days of receipt, CUSA may file a motion for the approval of the proposed modification of the Consent Decree to substitute/add parties, which motion will be granted upon a showing that the proposed transferee has the financial and technical ability to assume any obligations applicable to and binding upon the transferee in accordance with Paragraph 101.b, and that the proposed modification transfers the applicable obligations and liabilities under the Consent Decree from CUSA to the transferee. The United States or the MDEO, if applicable, may oppose the motion if they disagree that: (a) the proposed transferee has the financial and technical ability to assume any obligations applicable to and

the Court, and until three (3) years after the termination of this Consent Decree, CUSA will

retain, and will instruct its contractors and agents to preserve, all non-identical copies of all

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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: (a) were relied upon to establish completion of CUSA's compliance obligations set forth at Paragraph 74.b; or (b) were relied upon in making reports pursuant to Paragraphs 65.a(b) and 65.a(c). This information-retention requirement will apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or, if applicable to the Pascagoula Refinery, the MDEQ, CUSA will provide copies of any documents, records, or other information required to be maintained under this Paragraph.

- 107. Notwithstanding the provisions of Paragraph 106, CUSA need only retain for a period of one (1) year after approval of a Completion Report the records referenced at Paragraph 106 that establish completion of obligations corresponding to that approved Completion Report.
- 108. After the conclusion of the information retention period provided in Paragraphs 106 or 107, as applicable, CUSA will notify the United States and the MDEQ at least ninety (90) Days prior to the destruction of any documents, records, or other information within CUSA's possession or control and subject to the requirements of the applicable Paragraph, and, upon request by the United States or the MDEQ, CUSA will deliver any such documents, records, or other information to EPA or the MDEQ.
- 109. CUSA may assert that information required to be provided under this Section is protected as Confidential Business Information under 40 C.F.R. Part 2 and/or as "trade secrets" under Miss. Code Ann. Section 49-17-39. As to any information that CUSA seeks to protect as Confidential Business Information, CUSA will follow the procedures set forth in 40 C.F.R. Part 2. As to any information that CUSA seeks to protect as "trade secrets" under state law, CUSA will follow the procedures set forth in Miss. Code Ann. Section 49-17-39 or other applicable state law.
- 110. 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 or the MDEQ pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of

CUSA to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XXI. <u>EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS</u>

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- 111. This Consent Decree resolves all civil claims of the United States and the MDEQ for the violations alleged in the Complaint and in the Findings of Violation issued by EPA to CUSA dated December 17, 2013, through the date of lodging of this Consent Decree.
- 112. **No Admissions.** Neither this Consent Decree nor CUSA's consent to its entry constitutes an admission by CUSA of: violations alleged by EPA or the MDEQ in the Complaint; allegations stated in EPA's Revised Summary of Findings issued for the Richmond Refinery dated January 30, 2014; potential violations arising out of EPA's inspection of the Richmond Refinery on August 6, 2012-July 31, 2013; allegations stated in EPA's Notification of Inspection Findings and Areas of Concern issued for the Salt Lake City Refinery dated May 14, 2015; potential violations arising out of EPA's inspection of the Salt Lake City Refinery on June 24-27, 2013; allegations stated in EPA's Investigation Report issued for the El Segundo Refinery dated November 10, 2015; potential violations arising out of EPA's inspection of the El Segundo Refinery on November 4-8, 2013; allegations stated in EPA's Notice of General Duty Clause and Risk Management Program Violations issued for the Pascagoula Refinery dated October 20, 2016; potential violations arising out of EPA's inspection of the Pascagoula Refinery on September 8-11, 2014; allegations stated in EPA's Investigation Report issued for the Kapolei Refinery dated November 24, 2015; and/or potential violations arising out of EPA's inspection of the Kapolei Refinery on April 14-17, 2014. Except as expressly stated in this Consent Decree, CUSA reserves all defenses and all rights and remedies, legal and equitable, available to it in any action pertaining to this Consent Decree, any applicable permit, the CAA, or any other federal, state or local statute, rule or regulation.
- 113. <u>Plaintiffs' Reservations of Rights</u>. The United States and the MDEQ reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree will not be construed to limit the rights of the United States or the MDEQ to obtain penalties or injunctive relief under the CAA, EPCRA, CERCLA, or their implementing

regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraphs 85 and 111. The United States and the MDEQ further reserve 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, any Covered Refinery, whether related to the alleged violations addressed in this Consent Decree or otherwise.

- 114. In any subsequent administrative or judicial proceeding initiated by the United States or the MDEQ for injunctive relief, civil penalties, or other relief relating to the Covered Refineries, CUSA will 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 or the MDEQ 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 111.
- 115. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. CUSA is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and CUSA's compliance with this Consent Decree will be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the MDEQ do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that CUSA's compliance with any aspect of this Consent Decree will result in compliance with provisions of the CAA, CERCLA, or EPCRA, or with any other provisions of federal, state, or local laws, regulations, or permits.
- 116. This Consent Decree does not limit or affect the rights of CUSA or of the United States or the MDEQ 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 CUSA or the United States or the MDEQ, except as otherwise provided by law.
- 117. This Consent Decree will not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

1	XXII. <u>COSTS</u>				
2	118. The Parties will bear their own costs of this action, including attorneys' fees,				
3	except that the United States and the MDEQ will be entitled to collect the costs (including				
4	attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any				
5	stipulated penalties due but not paid by CUSA.				
6	XXIII. <u>NOTICES</u>				
7	119. Unless otherwise specified in this Consent Decree, whenever notifications,				
8	submissions, or communications are required by this Consent Decree, they will be made in				
9	writing and addressed as follows:				
10	As to the United States by e-mail:				
11	eescdcopy.enrd@usdoj.gov				
12	Re: DJ # 90-5-2-1-11576				
13	As to the United States by mail:				
14	EES Case Management Unit				
15	Environment and Natural Resources Division U.S. Department of Justice				
16	P.O. Box 7611 Washington, DC 20044-7611				
17	Re: DJ # 90-5-2-1-11576				
18	With copy to:				
19	Deborah Gitin				
20	U.S. Department of Justice				
21	Environmental Enforcement Section 301 Howard Street, Suite 1050				
22	San Francisco, CA 94105 Re: DJ # 90-5-2-1-11576				
23					
24	As to EPA:				
25	Director, Waste and Chemical Enforcement Division U.S. Environmental Protection Agency				
26	1200 Pennsylvania Avenue, NW				
27	Mail Code 2249A Washington, DC 20460				
28					

1	As to the MDEQ:				
2	Chief, Air Division				
3	Office of Pollution Control Mississippi Department of Environmental Quality				
4	P.O. Box 2261				
5	Jackson, MS 39225-2261				
6	As to CUSA:				
7	Corporation Service Company, Which Will Do Business in California as CSC – Lawyers				
8	Incorporating Service 2710 Gateway Oaks Drive, Suite 150N				
9	Sacramento, CA 95833				
10	With a copy to:				
11	Vice President and General Counsel, Downstream and Chemicals				
12	Chevron Products Company (a Chevron U.S.A. Inc. division) 6001 Bollinger Canyon Road, Building T				
13	San Ramon, California 94583				
14	120. Any Party may, by written notice to the other Parties, change its designated notice				
15	recipient or notice address provided above.				
16	121. Notices submitted pursuant to this Section will be deemed submitted: (a) on the				
17	Day sent if provided by email; (b) if provided by mail, three (3) Days after the date postmarked;				
18	and (c) on the Day of delivery if sent by overnight delivery, unless otherwise provided in this				
19	Consent Decree or by mutual agreement of the Parties in writing.				
20	XXIV. EFFECTIVE DATE				
21	122. The Effective Date of this Consent Decree will be the date upon which this				
22	Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted,				
23	whichever occurs first, as recorded on the Court's docket.				
24	XXV. <u>RETENTION OF JURISDICTION</u>				
25	123. The Court retains jurisdiction over this case until termination of this Consent				
26	Decree, for the purpose of resolving disputes arising under this Consent Decree or entering				
27	orders modifying this Consent Decree, pursuant to Sections XVIII and XXVI, or effectuating or				
28	enforcing compliance with the terms of this Consent Decree.				

XXVI. MODIFICATION

2.1

- 124. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by the United States and CUSA, and where the modification affects the Pascagoula Refinery, the MDEQ. Where the modification constitutes a material change to this Decree, it will be effective only upon approval by the Court.
- Decree that do not extend the date for the completion of any compliance requirement. Minor modifications to this Consent Decree must be in writing and signed by CUSA, the United States, and the MDEQ (with regard to modifications relating to the Pascagoula Refinery only). CUSA may propose minor modifications to the Consent Decree at any time by providing written notice to the United States that includes the proposed modification and the reason for the modification.
- 126. The following modifications will explicitly be considered non-material and do not require Court approval: (a) extensions of time not to exceed ninety (90) Days at a time or one hundred eighty (180) Days cumulatively; (b) changes in contact information for Section XXIII (Notices); (c) changes to the title of the individual designated in Paragraph 17.d, provided that the person is of equal or greater rank; and (d) correction of scrivener's errors.
- 127. Any disputes concerning modification of this Consent Decree will be resolved pursuant to Section XVIII (Dispute Resolution) provided, however, 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).

XXVII. <u>TERMINATION</u>

128. After CUSA has completed the requirements of Section VII (Paragraphs 16-17), Section VIII (Paragraphs 20, 21 and 22.a-22.c), Section IX (Paragraphs 25-26), Section X (Paragraphs 28-32), Section XI (Paragraphs 35, 37 and 38), Section XII (Paragraphs 42-45), Section XIII (Paragraphs 48-50) and Section XIV of this Consent Decree, has complied with all other compliance obligations of this Consent Decree, has complied with Section VII (Paragraphs 16-19) for a period of five (5) years after the Effective Date and with Section XI (Paragraphs 37-41) for a period of one (1) year after the date of notice in Paragraph 41(e), and has paid the civil

- Termination, the Parties will confer informally concerning the request and any disagreement that the Parties may have as to whether CUSA has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States after consultation with the MDEQ agrees that the requirements of the Consent Decree have been completed, the Parties will submit, for the Court's approval, a joint stipulation terminating the Consent Decree.
- 130. If the United States after consultation with the MDEQ does not agree that the requirements of the Consent Decree have been completed, CUSA may invoke Dispute Resolution under Section XVIII. However, CUSA will not seek Dispute Resolution of any dispute regarding termination until sixty (60) Days after service of its Request for Termination.

XXVIII. PUBLIC PARTICIPATION

131. 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. CUSA consents to entry of this Consent Decree without further notice and agrees not to withdraw from this Consent Decree or to oppose entry of this Consent Decree by the Court or to challenge any provision of the Consent Decree, unless the United States has notified CUSA in writing that it no longer supports entry of the Consent Decree.

XXIX. SIGNATORIES/SERVICE

132. Each undersigned representative of CUSA and the MDEQ, and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of

133. This Consent Decree may be signed in counterparts, and its validity may not be challenged on that basis. CUSA 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. All other court filings will be served through the Court's electronic filing system. CUSA need not file an answer to the Complaint unless or until the Court expressly declines to enter this Consent Decree.

XXX. <u>INTEGRATION</u>

134. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Consent Decree and supersedes all prior drafts, agreements and understandings, whether oral or written, concerning the settlement embodied herein. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree. Prior drafts of this Consent Decree will not be used in any action involving the interpretation or enforcement of this Consent Decree; accordingly, any rule of law or legal decision that would require ambiguities in this Consent Decree to be construed against the Party that drafted the provision at issue is not applicable to interpretation of this Consent Decree.

XXXI. FINAL JUDGMENT

135. Upon approval and entry of this Consent Decree by the Court, this Consent Decree will constitute a final judgment of the Court as to the United States, the MDEQ, and CUSA. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Rules 54 and 58 of the Federal Rules of Civil Procedure.

XXXII. APPENDICES

136. The following Appendices are attached to and part of this Consent Decree:

1	a.	"Appendix A" is the Technical Authority Process Progress Report;
2	b.	"Appendix B" is the Sulfidation Corrosion Inspections – Refinery-Specific
3	Information;	
4	C.	"Appendix C" is the Carbon Steel Piping Replacement – Piping
5	Identification and	Isometric Numbers;
6	d.	"Appendix D" is the Carbon Steel Piping Replacement – Implementation
7	Schedule;	
8	e.	"Appendix E" is the Integrity Operating Windows – Refinery-Specific
9	Information;	
10	f.	"Appendix F" is the Fitness-For-Service Level 1 Assessment Training
11	table; and	
12	g.	"Appendix G" is the Emergency-Response Training – Implementation
13	Schedule; and	
14	h.	"Appendix H" is the Statement of Work—Supplemental Environmental
15	Project.	
16		
17	Dated and entered	this day of, 2018.
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19		UNITED STATES DISTRICT JUDGE
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1	1 FOR THE UNITED STATES OF AMERICA:	9
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4	4 9/28/18 Pa	Flany XI. W.
5	5 Date JEFF	REV H. WOOD
6	6 Envir	g Assistant Attorney General comment and Natural Resources Division Department of Justice
7	7) A O O O
8	10/10/10	teloral as
9	Senio	ORAH A. GITIN (CA Bar. No. 284947) or Counsel
10	Envir	conmental Enforcement Section conment and Natural Resources Division
12	301 H	Howard Street, Suite 1050 Francisco, California 94105
13	Phone	e: (415) 744-6488
14	rax.	(415) 744-6476 l: Deborah.Gitin@usdoj.gov
15		Doorum Onmeguodoj.gov
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1	FOR THE UNITED STATES OF AME	RICA (continued):
2		ALEX C. TOP
3		ALEX G. TSE United States Attorney
4		Northern District of California
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6	10/15/18	mille &
7	Date	SARA WINSLOW (DCBN 457643) Chief, Civil Division
8		MICHELLE LO (NYBN 4325163)
9	`	Assistant United States Attorney 450 Golden Gate Avenue, Box 36055
10		San Francisco, California 94102-3495 Telephone: (415) 436-7180
11		Facsimile: (415) 436-6748
12		Email: Michelle.Lo@usdoj.gov
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FOR THE U.S. ENVIRO	NMENTAL PROTE	CTION AG	ENCY:	
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Date		ARKER BOI Administrator		
	Office of E	Enforcement a	and Compliance Assura	inc
	U.S. Envir 1200 Penn	onmental Pro sylvania Ave	ntection Agency nue, NW	
	Washingto	on, DC 20460		
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1	FOR THE U.S. ENVIRONMEN	NTAL PROTECTION AGENCY REGION 4:
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4	9/12/18	14/7/1
5	Date	ONIS "TREY" GLENN, III
6		Regional Administrator United States Environmental Protection Agency
7		Region IV
8	9/12/10	110
9	Date	LEIF PALMER
10	Date	Regional Counsel
11		United States Environmental Protection Agency Region IV
12		Per Part 1
13	9/12/18	Eller Rough
14	Date	ELLEN ROUCH
15	20	Attorney-Adviser United States Environmental Protection Agency
16		Region IV
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	FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 8:
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3	$C \cap A \mid A$
4	9.28.18
5	Date DOUGLAS H. BENEVENTO Regional Administrator
6	
7	9/20/18
8	Date SUZANNE J. BOHAN Assistant Regional Administrator
9	Office of Enforcement, Compliance
10	and Environmental Justice
11	5.112 240
12	Date MARC WEINER
13	Enforcement Attorney
14	Office of Enforcement, Compliance and Environmental Justice
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1	FOR THE U.S. ENVIRONMENT	AL PROTECTION AGENCY REGION 9:
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3	0//	11/1201
4	4/26/18	Michael B. Stoken
5	Dale	MICHAEL B. STOKER Regional Administrator
6		United States Environmental Protection Agency
7		Region IX
8	9/24/18	the Ale
9	Date	SYLVIA QUAST
10		Regional Counsel United States Environmental Protection Agency
11		Region IX
12	9/24/18	John Wither
13	Date	JOSHUA WIRTSCHAFTER
14		Assistant Regional Counsel Office of Regional Counsel
15		United States Environmental Protection Agency Region IX
16		Region IX
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1	FOR THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY:
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4	10/16/18 Thethen & Smitioner
5	Date GRETCHEN L. ZMITROVICH, P.E.
6	MS Bar No. 101470 Senior Attorney
7	Office of Pollution Control
8	Mississippi Department of Environmental Quality P.O. Box 2261
9	Jackson, Mississippi 39225-2261 Telephone: (601) 961-5050
10	Facsimile: (601) 961-5674
11	Email: gzmitrovich@mdeq.ms.gov
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1	FOR CHEVRON U.S.A. INC.:	
2	TOR CHEVROIT U.D.M. INC	
3		4 000
4	22 Bet 2018 Date	FRANK G. SOLER
5	Date	Assistant Secretary
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APPENDIX A TECHNICAL AUTHORITY PROCESS PROGRESS REPORT

Description of Topic Considered	Date

Description of Manufacturing TA Directive	Date Issued	Status of Implementation at Covered Refineries

CONSENT DECREE APPENDIX B

SULFIDATION CORROSION INSPECTIONS—REFINERY-SPECIFIC INFORMATION

1. El Segundo Refinery

Process Unit	Inspection Isometric Number	Inspection Completion Date

APPENDIX B (continued)

2. Pascagoula Refinery

Process Unit	Inspection Isometric Number	Inspection Completion Date

APPENDIX B (continued)

3. Richmond Refinery

Process Unit	Inspection Isometric Number	Inspection Completion Date

APPENDIX B (continued)

4. Salt Lake City Refinery

Inspection Isometric Number	Inspection Completion Date
	Inspection Isometric Number

APPENDIX C

2

CARBON STEEL PIPING REPLACEMENT—PIPING IDENTIFICATION AND ISOMETRIC NUMBERS

511-003-010 [4]

515-005-006 [1]

515-005-007 [1]

352-004-003 [1]

836-005-003 [4]

Inspection Isometric Number

3

4

1. El Segundo Refinery

4 Crude Unit

Coker Unit

Process Unit

Vacuum Resid Desulfurization Unit (VRDS)

Vacuum Resid Desulfurization Unit (VRDS)

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2. Pascagoula Refinery

Jet Hydrofiner Unit

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Process Unit	Inspection Isometric Number
Crude I Unit	0011-014-02-01
Crude I Unit	0011-014-02-03
Fluid Catalytic Cracking Unit (FCC)	0016-001-05-01
Fluid Catalytic Cracking Unit (FCC)	0016-003-01-01
Fluid Catalytic Cracking Unit (FCC)	0016-003-02-01
Crude II Unit	0061-008-03-01
Isomax I Unit	0013-009-05-01
Isomax I Unit	0013-009-06-01

3. Richmond Refinery

Process Unit	Inspection Isometric Number
4 Crude Unit	0955-002-008
4 Crude Unit	0955-002-014
4 Crude Unit	0955-002-015
4 Crude Unit	0955-002-016
4 Crude Unit	0955-002-017
4 Crude Unit	0955-002-018
4 Crude Unit	0955-002-030
4 Crude Unit	0955-002-031
4 Crude Unit	0955-002-032
4 Crude Unit	0955-007-009
4 Crude Unit	0955-007-017
4 Crude Unit	0955-009-003
4 Crude Unit	0955-012-001
4 Crude Unit	0955-012-002
4 Crude Unit	0955-013-007
4 Crude Unit	0955-013-008
4 Crude Unit	0955-013-009
4 Crude Unit	0955-015-002
4 Crude Unit	0955-015-017
4 Crude Unit	0955-019-034
4 Crude Unit	0955-019-017

4. Salt Lake City Refinery

Process Unit	Inspection Isometric Number
Fluid Catalytic Cracking Unit (FCC)	032-001-005
Fluid Catalytic Cracking Unit (FCC)	032-001-006
Fluid Catalytic Cracking Unit (FCC)	032-001-007
Fluid Catalytic Cracking Unit (FCC)	032-019-003
Fluid Catalytic Cracking Unit (FCC)	032-019-005
Fluid Catalytic Cracking Unit (FCC)	032-019-015
Fluid Catalytic Cracking Unit (FCC)	032-019-017
Fluid Catalytic Cracking Unit (FCC)	032-019-020
Fluid Catalytic Cracking Unit (FCC)	032-021-062
Fluid Catalytic Cracking Unit (FCC)	032-022-002
Coker Unit	070-010-001
Coker Unit	070-010-002
Coker Unit	070-010-004
Coker Unit	070-010-009
Coker Unit	070-010-017
Hydrofiner Unit	071-008-005

APPENDIX D

CARBON STEEL PIPING REPLACEMENT—IMPLEMENTATION SCHEDULE

1. El Segundo Refinery

Process Unit	Inspection Isometric Number	Material Selected	Date Replacement Completed
4 Crude Unit	511-003-010 [4]		
Vacuum Resid Desulfurization Unit (VRDS)	515-005-006 [1]		
Vacuum Resid Desulfurization Unit (VRDS)	515-005-007 [1]		
Coker Unit	352-004-003 [1]		
Jet Hydrofiner Unit	836-005-003 [4]		

2. Pascagoula Refinery

Process Unit	Inspection Isometric Number	Material Selected	Date Replacement Completed
Crude I Unit	0011-014-02-01		
Crude I Unit	0011-014-02-03		
Fluid Catalytic Cracking Unit (FCC)	0016-001-05-01		
Fluid Catalytic Cracking Unit (FCC)	0016-003-01-01		
Fluid Catalytic Cracking Unit (FCC)	0016-003-02-01		
Crude II Unit	0061-008-03-01		
Isomax I Unit	0013-009-05-01		
Isomax I Unit	0013-009-06-01		

3. Richmond Refinery

Process Unit	Inspection Isometric Number	Material Selected	Date Replacement Completed
4 Crude Unit	0955-002-008		
4 Crude Unit	0955-002-014		
4 Crude Unit	0955-002-015		
4 Crude Unit	0955-002-016		
4 Crude Unit	0955-002-017		
4 Crude Unit	0955-002-018		
4 Crude Unit	0955-002-030		
4 Crude Unit	0955-002-031		
4 Crude Unit	0955-002-032		
4 Crude Unit	0955-007-009		
4 Crude Unit	0955-007-017		
4 Crude Unit	0955-009-003		
4 Crude Unit	0955-012-001		
4 Crude Unit	0955-012-002		
4 Crude Unit	0955-013-007		
4 Crude Unit	0955-013-008		
4 Crude Unit	0955-013-009		
4 Crude Unit	0955-015-002		
4 Crude Unit	0955-015-017		
4 Crude Unit	0955-019-034		
4 Crude Unit	0955-019-017		

4. Salt Lake City Refinery

Process Unit	Inspection Isometric Number	Material Selected	Date Replacement Completed
Fluid Catalytic Cracking Unit (FCC)	032-001-005		
Fluid Catalytic Cracking Unit (FCC)	032-001-006		
Fluid Catalytic Cracking Unit (FCC)	032-001-007		
Fluid Catalytic Cracking Unit (FCC)	032-019-003		
Fluid Catalytic Cracking Unit (FCC)	032-019-005		
Fluid Catalytic Cracking Unit (FCC)	032-019-015		
Fluid Catalytic Cracking Unit (FCC)	032-019-017		
Fluid Catalytic Cracking Unit (FCC)	032-019-020		
Fluid Catalytic Cracking Unit (FCC)	032-021-062		
Fluid Catalytic Cracking Unit (FCC)	032-022-002		
Coker Unit	070-010-001		
Coker Unit	070-010-002		
Coker Unit	070-010-004		
Coker Unit	070-010-009		
Coker Unit	070-010-017		
Hydrofiner Unit	071-008-005		

APPENDIX E

INTEGRITY OPERATING WINDOWS—REFINERY-SPECIFIC INFORMATION

1. El Segundo Refinery

Process Unit	Stage 1 Implementation Completion Date	Stage 2 Implementation Completion Date
2 Crude Unit		
4 Crude Unit		
Fluid Catalytic Cracking Unit (FCC)		
Naphtha Hydrotreater 3 (NHT-3)		
Naphtha Hydrotreater 2 (NHT-2)		
Vacuum Resid Desulfurization (VRDS)		
Vacuum Gas Oil Unit (VGO)		
Jet Hydrofiner Plant (JHP)		
Naptha Hydrotreater (NHT)		
Hydrocracker – CKN		
Hydrocracker – Isocracker		
Coker Unit		
Minalk Plant		
Penex Plant		
Sulfuric Acid Alkylation Unit		
No. 3 Caustic Treating Plant		
Butamer Plant		
Continuous Catalytic Reforming (CCR)		

Process Unit	Stage 1 Implementation Completion Date	Stage 2 Implementation Completion Date
Amine-H2S Recovery (No. 4 H2S)		
Amine-H2S Recovery (No. 5 H2S)		
Amine-H2S Recovery (No. 6 H2S)		
SRU-Sulfur Recovery Unit 10		
SRU-Sulfur Recovery Unit 20		
SRU-Sulfur Recovery Unit 70		
SRU-Sulfur Recovery Unit 73		
Steam Naphtha Reformer (SNR)		

2. Pascagoula Refinery

Process Unit	Stage 1 Implementation Completion Date	Stage 2 Implementation Completion Date
Crude I Unit		
Crude II Unit		
Crude Vacuum Distillation Unit (VDU)		
Fluid Catalytic Cracking Unit (FCC)		
Hydrodenitrification (HDN)		
FCC Hydrofiner		
HDS I Naphtha Hydrotreater		
Jet Hydrofiner		
HDS 2 Naphtha Hydrotreater		
Base Oil Hydrocracker & Iso-dewaxing		
Coker Hydrodenitrification (CHDN)		
Residuum Desulfurization (RDS)		
Isomax I Unit		
Isomax II Unit		
Ethyl Benzene Plant		
Coker Unit		
Sulfuric Acid Alkylation Unit II		
Sulfuric Acid Alkylation Unit I		
Light Ends Recovery I		

Process Unit	Stage 1 Implementation Completion Date	Stage 2 Implementation Completion Date
Light Ends Recovery II		
Rheniformer I		
Continuous Catalytic Reforming (CCR)		
Gas Recovery Unit (GRU)		
Amine-H2S Recovery I		
Amine Regeneration		
Sulfur Recovery Unit V (SRU)		
Sulfur Recovery Unit IV (SRU)		
Sulfur Recovery Unit VI (SRU)		
SRU-Sulfur Recovery		
Hydrogen Unit II		
Hydrogen Unit III		
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3. Richmond Refinery

Process Unit	Stage 1 Implementation Completion Date	Stage 2 Implementation Completion Date
4 Crude Unit		
Fluid Catalytic Cracking Unit (FCC)		
Jet Hydrotreater (JHT)		
Diesel Hydrotreater (DHT)		
Gas Hydrotreater (GHT)		
5 Naptha Hydrotreater (NHT)		
Light Neutral Hydrofinisher (LNF)		
Heavy Neutral Hydrofinisher (HNF)		
Taylor Katalytic Cracking (TKC)		
Heavy Neutral Hydrocracker (HNC)		
Light Neutral Hydrocracker (LNC)		
Isocracker		
Taylor Katalytic Denitrification (TKN)		
Iso Distillation and Gas Recovery		
Alkylation and Alkylation Gas Recovery		
Propylene Polymer		
Penhex Isomerization		
No. 4 Catalytic Reforming		
No. 5 Catalytic Reforming		

APPENDIX E (continued) 1 2 **Process Unit** Stage 1 Stage 2 Implementation Implementation 3 **Completion Date Completion Date** 4 Richmond Lube Oil Plant Gas Recovery (GRU) 5 6 Solvent Deasphalting (SDA) 7 Butamer 8 Amine-3 H2S Recovery 9 Amine-4 H2S Recovery 10 Amine-5 H2S Recovery 11 No. 1 Sulfur Recovery Unit (SRU) 12 No. 2 Sulfur Recovery Unit (SRU) 13 No. 3 Sulfur Recovery Unit (SRU) 14 16

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4. Salt Lake City Refinery

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Process Unit Stage 1 Stage 2 **Implementation Implementation Completion Date Completion Date** Crude Unit Gas Recovery Unit Fluid Catalytic Cracking Unit (FCC) Alkylation Unit Hydrofiner (HDN) Hydrogen Desulfurization (HDS) Vacuum Gas Oil Unit (VGO) SRU/TGU – Sulfur Recovery and Tail Gas Unit 1 SRU/TGU - Sulfur Recovery and Tail Gas Unit 2 Isomerization Unit Coker Unit Reformer Amine Unit 1 Amine Unit 2

APPENDIX F

FITNESS-FOR-SERVICE LEVEL 1 ASSESSMENT TRAINING

Training Location	Training Date(s)	Attendee Title at the Time of Training	Attendee Facility at the time of Training	Proficiency Exam Taken [Y/N]

APPENDIX G

EMERGENCY-RESPONSE TRAINING—IMPLEMENTATION SCHEDULE

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Date of Training and Location	Training Module Description	Attendee Title at the Time of Training	Attendee Facility at the Time of Training

APPENDIX H 1 STATEMENT OF WORK 2 SUPPLEMENTAL ENVIRONMENTAL PROJECT 3 **Project:** 4 Purchase of emergency response equipment to be owned and used by the City of Richmond, 5 California Fire Department, City of Manhattan Beach, California Fire Department (El Segundo Refinery), City of El Segundo Fire Department, Department of Emergency Services for the City 6 and County of Honolulu, Hawaii (Kapolei Refinery), Jackson County Office of Emergency 7 Services (Pascagoula Refinery), Mississippi Department of Environmental Quality, South Davis Metro Fire Service Area (Salt Lake City Refinery), and Salt Lake City Fire Department. CUSA 8 must complete this SEP by no later than eighteen (18) months after the Effective Date. 9 **Nexus to Clean Air Act Section 112(r):** 10 This SEP enhances the capabilities of emergency responders located near the Covered Refineries 11 and the Kapolei Refinery and will facilitate quick and efficient response to releases associated with emergency events. Adequate nexus is deemed to exist using category G – environmental 12 compliance promotion and emergency response planning and preparedness, and enabling 13 organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop 14 emergency response plans to better respond to chemical incidents – in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate because the primary impact of the donation of 15 emergency response equipment accrues to the same emergency planning districts in which the 16 Covered Refineries and the Kapolei Refinery are located. Further, this SEP relates directly to the violations of Section 112(r) of the Clean Air Act which are alleged in the Complaint. 17 1. Description of Project -- City of Richmond, California Fire Department 18 19 Purchase of emergency response equipment to be owned and used by the City of Richmond Fire Department. 20 **Scheduling:** 21 22 CUSA intends to order the equipment described below for the City of Richmond Fire Department within one hundred eighty (180) Days following the Effective Date. Dependent on 23 supplier capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or 24 substantially similar equipment in the event the equipment listed below is not available, is 25 delivered to the City of Richmond Fire Department. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the City of Richmond Fire 26 Department. 27 28

1	APPENDIX H (continued)
2	City of Richmond, California Fire Department (continued)
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4 5	A. Eight (8) large diameter fire hoses valued at \$100,000 total.
6	B. Ten (10) fire nozzles valued at \$50,000 total.
7	C. One (1) year supply of fire suppression foam valued at \$20,000.
8	D. One hundred (100) Scott self-contained breathing apparatus face masks valued at \$181,911 total.
10	E. Forty (40) Air-Pax X3 Pro SCBA harnesses valued at \$214,247.20 total.
11	F. Twenty (20) Scott safety SCBA cylinders valued at \$40,000 total.
12	G. Three (3) pumper fire engines with custom specifications valued at \$2,400,000 total.
13	H. One (1) fire truck with custom specifications valued at \$1,450,000.
1415	I. Eight (8) ISG/Scott thermal imaging cameras valued at \$68,000 total.
16	J. Eight (8) EMS chest compression machines (LUCAS chest device 3) valued at \$136,000 total.
171810	TOTAL EQUIPMENT COST FOR THE CITY OF RICHMOND FIRE DEPARTMENT: Approximately \$4,660,158.20
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1	APPENDIX H (continued)
2	2. Description of Project City of Manhattan Beach, California Fire Department (El Segundo Refinery)
3 4	Purchase of emergency response equipment to be owned and used by the City of Manhattan Beach Fire Department.
5 6	Scheduling:
7 8 9 10 11	CUSA intends to order the equipment described below for the City of Manhattan Beach Fire Department within one hundred eighty (180) Days following the Effective Date. Dependent on supplier capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the City of Manhattan Beach Fire Department. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the City of Manhattan Beach Fire Department.
12	A. Thirty-one (31) Air-Pax X3 Pro SCBA harnesses valued at \$181,815.53 total.
13 14	B. Seventy (70) Scott 45 minute Carbon Fiber Cylinders valued at \$140,000 total.
15	C. Thirty (30) Scott Sight Full Kits with Left Side Communications Bracket valued at \$62,000 total.
1617	D. Fifty (50) Scott, Kevlar 4 Point Headnets with Voice Amp Bracket valued at \$21,850 total.
18	E. Thirty (30) Scott EPIC 3 Radio Direct Interface Voice Amplifiers, Open Bracket Configuration valued at \$19,902.27 total.
1920	F. One (1) 19300 Basic Small Engine Repair Tool Kit valued at \$500.
21	G. One (1) Life Pack AED and Component valued at \$22,000.
22 23	H. One (1) 6 x LifePack 15 V4 - Cardiac Monitor and Associated Accessories valued at \$261,149.48.
24	I. One (1) Bauer Unicus 4 13H-E3 Compressor valued at \$58,000.
25	J. Twenty-six (26) batteries for portable radios valued at \$3,892.99 total.
262728	K. Thirty (30) Motorola APX 8000H All Band Portable Radios Model 3.5 valued at \$257,260.83 total.

1	APPENDIX H (continued)
2	City of Manhattan Beach, California Fire Department (El Segundo Refinery) (continued)
3	L. One (1) Emergency Utility Vehicle Ford F250 Super Duty + Electrical/Communications/Lighting Upgrades valued at \$83,187.15.
5	M. One (1) Polaris Emergency Response vehicle valued at \$50,614.27.
6	N. One (1) Matrice 210 Drone valued at \$9,307.50.
7	O. One (1) Zenmuse xt 640X512 thermal camera valued at \$10,950.
8	TOTAL EQUIPMENT COST FOR THE CITY OF MANHATTAN BEACH FIRE DEPARTMENT: Approximately \$1,182,430.02
10	DEI ARTMENT. Approximately \$1,102,430.02
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1	APPENDIX H (continued)
2	3. Description of Project City of El Segundo, California Fire Department
3 4	Purchase of emergency response equipment to be owned and used by the City of El Segundo Fire Department.
5	Scheduling:
6 7 8 9 10	CUSA intends to order the equipment described below for the City of El Segundo Fire Department within one hundred eighty (180) Days following the Effective Date. Dependent on supplier capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the City of El Segundo Fire Department. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the City of El Segundo Fire Department.
11 12	A. Forty-five (45) Lions/Janesville CVBM-K7 Natural PBI Max V-Force Turnout Coats in various sizes valued at \$63,000 total.
13 14	B. Forty-five (45) Lions/Janesville PVFM-K7 Natural PBI Max V-Force Belted Turnout Pants in various sizes valued at \$45,000 total.
15	C. Forty-five (45) Phenix Helmets, NFPA 1500-2007 GR Yellow valued at \$13,500 total.
16 17	D. Forty-five (45) Sam Brown 6" LA Style Leather Shields drilled for Phenix Helmet valued at \$3,150 total.
18 19	E. Forty-five (45) Pro-tech Model Titan Short Cuff Structural Gloves in various sizes valued at \$3,150 total.
20	F. Forty-five (45) Majestic Pac III / C6 Carbon Hoods valued at \$3,150 total.
21 22	G. Forty-five (45) Thorogood 14" power HV Leather Structural Bunker Boots in various sizes valued at \$22,500 total.
23 24	H. One (1) Forward Looking Infrared FLIR E4 @ - Infrared Camera with MSX 4,800 pixel detector valued at \$2,000.
25	I. One (1) Res-Q-Jack Auto X 2 Strut Kit, 2 point standard kit valued at \$6,500.
2627	J. One (1) 2019 Ford F-250 Super duty XL Crew Cab with custom specifications valued at \$85,000.

1	TOTAL EQUIPMENT COST FOR THE CITY OF EL SEGUNDO FIRE DEPARTMENT: Approximately \$246,950
2	APPENDIX H (continued)
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4	4. Description of Project Department of Emergency Management for the City and County of Honolulu, Hawaii (Kapolei Refinery)
5	Purchase of emergency response equipment to be owned and used by the Department of
6	Emergency Management for the City and County of Honolulu, Hawaii.
7	Scheduling:
8	CUSA intends to order the equipment described below for the Department of Emergency
9	Management for the City and County of Honolulu within one hundred eighty (180) Days following the Effective Date. Dependent on supplier capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each
11	piece of equipment described below, or substantially similar equipment in the event the
12	equipment listed below is not available, is delivered to the Department of Emergency Management for the City and County of Honolulu. If necessary, substantially similar equipment
13	will be purchased by CUSA after consultation with the Department of Emergency Management for the City and County of Honolulu.
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15	A. Thirty-two (32) Iridium 9555 satellite phones valued at \$48,115.86 total.
16	B. Forty-seven (47) personal radioactivity detectors valued at \$45,120 total.
17	C. Forty (40) SCBA 60 minute Carbon Fiber Cylinders, valued at \$80,000 total.
18	D. Twenty (20) SKED Basic Rescue Systems with cobra buckles valued at \$17,500 total.
19	E. Ninety-one (91) Ferno scoop backboards valued at \$109,200 total.
20	F. Five hundred (500) CMC Rescue webbings valued at \$270 total.
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22	TOTAL EQUIPMENT COST FOR THE DEPARTMENT OF EMERGENCY SERVICES FOR THE CITY AND COUNTY OF HONOLULU: Approximately \$300,205.86
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1	APPENDIX H (continued)
2	5. Description of Project Jackson County Office of Emergency Services (Pascagoula Refinery)
3 4	Purchase of emergency response equipment to be owned and used by the Jackson County Office of Emergency Services.
5 6	Scheduling:
7	CUSA intends to order the equipment described below for the Jackson County Office of Emergency Services within one hundred eighty (180) Days following the Effective Date.
8	Dependent on supplier capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment
9 10	described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the Jackson County Office of Emergency Services. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the Jackson
11	County Office of Emergency Services.
12 13	A. Two (2) red 1500 gpm fire trucks with a 20 to 40 gallon foam cell with a 2 stage Hale pump including all NFPA equipment for a Class A pumper with custom specifications valued at \$1,127,223 total.
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15	B. One (1) air/light truck with custom specifications valued at \$442,362.
16 17	C. Four (4) red Dodge 1500 crew cab Special Service Vehicles with 4-wheel drive valued at \$240,000 total.
18	D. One (1) silver Dodge 1500 crew cab Special Service Vehicle with 4-wheel drive valued at \$60,000.
19	E. Three (3) Rescue One 1673-X2 Connector Boats equipped with dive platform, control
20	console, Rescue One Pro Power Outboard Motor, Light Rack, Fire boat fire pump and Night vision package and three (3) 1673-SS Transport Trailers valued at \$144,000 total.
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22	F. Twenty (20) 45 minute Scott Air Pak 75 4500PSI self-contained breathing apparatus valued at \$110,000 total.
23	
24	G. Forty (40) spare 45 minute bottles valued at \$80,000 total.
2526	H. Ten (10) Scott Safety 4-strap face masks for Air Pak 75 self-contained breathing apparatus valued at \$20,000 total.
27	I. One (1) 4x125 Night Scan XL 200 with handheld control valued at \$25,000.
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1	APPENDIX H (continued)
2	Jackson County Office of Emergency Services (Pascagoula Refinery) (continued)
3	J. Four (4) Yuneec H520 Drone bundles for site reconnaissance including weatherproofing, valued at \$30,000 total.
5	K. Sixteen (16) H520 5250mAh 4s/15.2V (79.8Wh) Lithium Polymer batteries for Yuneec drones valued at \$3,360 total.
7	L. Four (4) Industrial H520 SC4000-4H Balancing Smart Chargers for Yuneec drones valued at \$360 total.
8 9	M. Twelve (12) mobile 800 Motorola radios with digital and analog capability valued at \$70,000 total.
10	N. Fifteen (15) Active Shooter Event Casualty Response Kits valued at \$6,000 total.
1112	O. One (1) Standard Decontamination Shower System valued at \$4,000.
13	P. Four (4) Complete Darley Flow Test Kits for hydrants and fire pumps valued at \$4,800 total.
14	Q. Four (4) Apparatus Flow Test Kits valued at \$6,000 total.
15	R. Six (6) Pro/Pak Foam Systems valued at \$9,000 total.
16	S. Fifteen (15) MV Fire/Rescue Crash Kits valued at \$12,000 total.
17 18	T. Two (2) Air Hammer Super-Duty Rescue Kits valued at \$5,600 total.
19	U. Four (4) Extricator Forcible Entry Kits valued at \$24,000 total.
20	V. Twenty-five (25) Vertex Vented Rescue Helmets valued at \$3,750 total.
2122	W. Three (3) Telescoping Aluminum Support Kits, combined BC028 and BL623 kits valued at \$14,100 total.
23	X. Twenty (20) Universal Swift Water Rescue Vests valued at \$6,200 total.
24	Y. Three (3) CMC Rescue Rope Team Kits valued at \$22,500 total.
2526	Z. Three (3) SKED Basic Rescue Systems valued at \$2,160 total.
27	AA. Three (3) SKED-EVAC Tripods valued at \$5,700 total.
28	AB. Three (3) Rescue Kit 1 with Power Talk Boxes valued at \$30,000 total.

1		APPENDIX H (continued)
2		Jackson County Office of Emergency Services (Pascagoula Refinery) (continued)
3	AC.	Ten (10) Hotstick Voltage Detectors valued at \$4,150 total.
5	AD.	Eight (8) Pelican Remote Area Lighting Systems valued at \$16,000 total.
6	AE.	One (1) Bauer Complete Compressor Air System-AFG Package valued at \$60,000.
7	AF.	Four (4) GasAlertMicroClip 4 Gas Detectors valued at \$2,600 total.
89	AG.	Four (4) Quad Gas Calibration kits for the 4 gas GasAlertMicroClip Detectors valued at \$800 total.
10 11	AH.	Four (4) Calibration Gas Regulator for the 4 gas GasAlertMicroClip Detectors valued at \$800 total.
12	AI.	Four (4) Micro Dock II GasAlertMicroClip Docking Stations valued at \$2,400 total.
13	AJ.	Four (4) Sensit Gold G2 Series 4 gas detectors with pumps valued at \$8,800 total.
14 15	AK.	Four (4) calibration kits for the Sensit Gold G2 Series 4 gas detector valued at \$2,600 total.
16	AL.	One (1) Kumatsu PC210LC-10 SLF Excavator trackhoe valued at \$180,000.
17 18		TAL EQUIPMENT COST FOR THE JACKSON COUNTY OFFICE OF ERGENCY SERVICES: Approximately \$2,786,265
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1	APPENDIX H (continued)
2	6. Description of Project Mississippi Department of Environmental Quality (Pascagoula Refinery)
3 4	Purchase of emergency response equipment to be owned and used by the Mississippi Department of Environmental Quality ("MDEQ").
5 6	Scheduling:
7 8 9 10	CUSA intends to order the equipment described below for the MDEQ within one hundred eighty (180) Days following the Effective Date. Dependent on supplier capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the MDEQ. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the MDEQ.
11 12	A. Two (2) 1 Ton 4WD Emergency Response trucks (Ford F350 XLT Diesel with custom specifications) valued at \$150,000 total.
13	B. Two (2) 4WD Emergency Response trucks (Ford F150 XL SuperCab with 4WD) valued at \$84,000 total.
14 15	C. One (1) 2WD Emergency Response truck (Ford F-150 XL SuperCab with 2WD) valued at \$37,000.
16 17 18	D. Four (4) iPads to fly response drone and have data availability to responders during emergencies (Apple - iPad Pro 12.9-inch with Wi-Fi + Cellular - 256 GB) valued at \$4,400 total.
19	E. One (1) Honda Pioneer 700 Deluxe UTV for statewide responses valued at \$16,000.
20	F. One (1) Honda Pioneer 700-4 Deluxe UTVs for statewide responses valued at \$20,000.
21 22	G. One (1) Tandem axle trailer for hauling UTV (2018 Big Tex 45SS-16 with Tailgate) valued at \$2,500.
23	TOTAL EQUIPMENT COST FOR THE MDEQ: Approximately \$313,900
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Scheduling: CUSA intends to order the equipment described below for the South Davis Metro Fire Service Area within one hundred eighty (180) Days following the Effective Date. Dependent on supplicapabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the South Davis Metro Fire Service Area. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the South Davis Metro Fire Service Area. A. One (1) Weatherpak MTR Surface Atmospheric Monitoring Station valued at \$20,404.47. B. One (1) 2019 Peterbuilt 337 26'-28' diesel-powered box truck with hydraulic lift gate value at \$112,000. C. One (1) custom shelving unit for box truck valued at \$5,500. D. One (1) Telescoping pole and retrieval hook attachment valued at \$137. E. Six (6) Hydrofluoric Acid Neutralizing Loose Absorbent kits valued at \$570 total. F. Six (6) Spill-X-S Solvent Adsorbent kits valued at \$3,180 total. G. Six (6) Spill-X-C Caustic-Neutralizing Adsorbent kits valued at \$2,880 total. H. One (1) Build-A-Berm Barrier Kit valued at \$760. I. Twelve (12) HAZMAX Regular Steel Toe Boots (various sizes) valued at \$1,800 total. J. Three (3) Safe N' Clean TM SplashGuard Level D Coveralls (various sizes) valued at \$690 total. K. Six (6) Spill-X-A Acid-Neutralizing Adsorbent kits valued at \$1,920 total.	1	APPENDIX H (continued)
Purchase of emergency response equipment to be owned and used by the South Davis Metro Fis Service Area. Scheduling: CUSA intends to order the equipment described below for the South Davis Metro Fire Service Area within one hundred eighty (180) Days following the Effective Date. Dependent on supplicapabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the South Davis Metro Fire Service Area. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the South Davis Metro Fire Service Area. A. One (1) Weatherpak MTR Surface Atmospheric Monitoring Station valued at \$20,404.47. B. One (1) 2019 Peterbuilt 337 26'-28' diesel-powered box truck with hydraulic lift gate value at \$112,000. C. One (1) custom shelving unit for box truck valued at \$5,500. D. One (1) Telescoping pole and retrieval hook attachment valued at \$137. E. Six (6) Hydrofluoric Acid Neutralizing Loose Absorbent kits valued at \$570 total. F. Six (6) Spill-X-S Solvent Adsorbent kits valued at \$3,180 total. G. Six (6) Spill-X-C Caustic-Neutralizing Adsorbent kits valued at \$2,880 total. H. One (1) Build-A-Berm Barrier Kit valued at \$760. I. Twelve (12) HAZMAX Regular Steel Toe Boots (various sizes) valued at \$1,800 total. J. Three (3) Safe N' Clean TM SplashGuard Level D Coveralls (various sizes) valued at \$690 total. K. Six (6) Spill-X-A Acid-Neutralizing Adsorbent kits valued at \$1,920 total. L. Four (4) Coarse Bristle PRO-SWEEP TM Broom Head 24" and handles valued at \$240 total.		7. Description of Project South Davis Metro Fire Service Area (Salt Lake City
Furchase of emergency response equipment to be owned and used by the South Davis Metro Fig. Service Area. Scheduling: CUSA intends to order the equipment described below for the South Davis Metro Fire Service Area within one hundred eighty (180) Days following the Effective Date. Dependent on supplicapabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment disted below is not available, is delivered to the South Davis Metro Fire Service Area. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the South Davis Metro Fire Service Area. A. One (1) Weatherpak MTR Surface Atmospheric Monitoring Station valued at \$20,404.47. B. One (1) 2019 Peterbuilt 337 26'-28' diesel-powered box truck with hydraulic lift gate value at \$112,000. C. One (1) custom shelving unit for box truck valued at \$5,500. D. One (1) Telescoping pole and retrieval hook attachment valued at \$137. E. Six (6) Hydrofluoric Acid Neutralizing Loose Absorbent kits valued at \$570 total. F. Six (6) Spill-X-S Solvent Adsorbent kits valued at \$3,180 total. G. Six (6) Spill-X-C Caustic-Neutralizing Adsorbent kits valued at \$2,880 total. H. One (1) Build-A-Berm Barrier Kit valued at \$760. I. Twelve (12) HAZMAX Regular Steel Toe Boots (various sizes) valued at \$1,800 total. J. Three (3) Safe N' Clean™ SplashGuard Level D Coveralls (various sizes) valued at \$690 total. K. Six (6) Spill-X-A Acid-Neutralizing Adsorbent kits valued at \$1,920 total. L. Four (4) Coarse Bristle PRO-SWEEP™ Broom Head 24" and handles valued at \$240 total.		Refinery)
CUSA intends to order the equipment described below for the South Davis Metro Fire Service Area within one hundred eighty (180) Days following the Effective Date. Dependent on supplicapabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the South Davis Metro Fire Service Area. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the South Davis Metro Fire Service Area. A. One (1) Weatherpak MTR Surface Atmospheric Monitoring Station valued at \$20,404.47. B. One (1) 2019 Peterbuilt 337 26'-28' diesel-powered box truck with hydraulic lift gate value at \$112,000. C. One (1) custom shelving unit for box truck valued at \$5,500. D. One (1) Telescoping pole and retrieval hook attachment valued at \$137. E. Six (6) Hydrofluoric Acid Neutralizing Loose Absorbent kits valued at \$570 total. F. Six (6) Spill-X-S Solvent Adsorbent kits valued at \$3,180 total. G. Six (6) Spill-X-C Caustic-Neutralizing Adsorbent kits valued at \$2,880 total. H. One (1) Build-A-Berm Barrier Kit valued at \$760. I. Twelve (12) HAZMAX Regular Steel Toe Boots (various sizes) valued at \$1,800 total. J. Three (3) Safe N' Clean™ SplashGuard Level D Coveralls (various sizes) valued at \$690 total. K. Six (6) Spill-X-A Acid-Neutralizing Adsorbent kits valued at \$1,920 total. L. Four (4) Coarse Bristle PRO-SWEEP™ Broom Head 24" and handles valued at \$240 total.		Purchase of emergency response equipment to be owned and used by the South Davis Metro Fire Service Area.
CUSA intends to order the equipment described below for the South Davis Metro Fire Service Area within one hundred eighty (180) Days following the Effective Date. Dependent on suppli capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the South Davis Metro Fire Service Area. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the South Davis Metro Fire Service Area. A. One (1) Weatherpak MTR Surface Atmospheric Monitoring Station valued at \$20,404.47. B. One (1) 2019 Peterbuilt 337 26'-28' diesel-powered box truck with hydraulic lift gate value at \$112,000. C. One (1) custom shelving unit for box truck valued at \$5,500. D. One (1) Telescoping pole and retrieval hook attachment valued at \$137. E. Six (6) Hydrofluoric Acid Neutralizing Loose Absorbent kits valued at \$570 total. F. Six (6) Spill-X-S Solvent Adsorbent kits valued at \$3,180 total. G. Six (6) Spill-X-C Caustic-Neutralizing Adsorbent kits valued at \$2,880 total. H. One (1) Build-A-Berm Barrier Kit valued at \$760. I. Twelve (12) HAZMAX Regular Steel Toe Boots (various sizes) valued at \$1,800 total. J. Three (3) Safe N' Clean™ SplashGuard Level D Coveralls (various sizes) valued at \$690 total. K. Six (6) Spill-X-A Acid-Neutralizing Adsorbent kits valued at \$1,920 total. L. Four (4) Coarse Bristle PRO-SWEEP™ Broom Head 24" and handles valued at \$240 total.	6	Scheduling:
C. One (1) custom shelving unit for box truck valued at \$5,500. D. One (1) Telescoping pole and retrieval hook attachment valued at \$137. E. Six (6) Hydrofluoric Acid Neutralizing Loose Absorbent kits valued at \$570 total. F. Six (6) Spill-X-S Solvent Adsorbent kits valued at \$3,180 total. G. Six (6) Spill-X-C Caustic-Neutralizing Adsorbent kits valued at \$2,880 total. H. One (1) Build-A-Berm Barrier Kit valued at \$760. I. Twelve (12) HAZMAX Regular Steel Toe Boots (various sizes) valued at \$1,800 total. J. Three (3) Safe N' Clean™ SplashGuard Level D Coveralls (various sizes) valued at \$690 total. K. Six (6) Spill-X-A Acid-Neutralizing Adsorbent kits valued at \$1,920 total. L. Four (4) Coarse Bristle PRO-SWEEP™ Broom Head 24" and handles valued at \$240 total.	7 8 9 10 11 12 13	CUSA intends to order the equipment described below for the South Davis Metro Fire Service Area within one hundred eighty (180) Days following the Effective Date. Dependent on supplier capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or substantially similar equipment in the event the equipment listed below is not available, is delivered to the South Davis Metro Fire Service Area. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the South Davis Metro Fire Service Area. A. One (1) Weatherpak MTR Surface Atmospheric Monitoring Station valued at \$20,404.47. B. One (1) 2019 Peterbuilt 337 26'-28' diesel-powered box truck with hydraulic lift gate valued
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F. Six (6) Spill-X-S Solvent Adsorbent kits valued at \$3,180 total. G. Six (6) Spill-X-C Caustic-Neutralizing Adsorbent kits valued at \$2,880 total. H. One (1) Build-A-Berm Barrier Kit valued at \$760. I. Twelve (12) HAZMAX Regular Steel Toe Boots (various sizes) valued at \$1,800 total. J. Three (3) Safe N' Clean TM SplashGuard Level D Coveralls (various sizes) valued at \$690 total. K. Six (6) Spill-X-A Acid-Neutralizing Adsorbent kits valued at \$1,920 total. L. Four (4) Coarse Bristle PRO-SWEEP TM Broom Head 24" and handles valued at \$240 total.	17	D. One (1) Telescoping pole and retrieval hook attachment valued at \$137.
	19 20 21 22 23 24 25 26 27	 F. Six (6) Spill-X-S Solvent Adsorbent kits valued at \$3,180 total. G. Six (6) Spill-X-C Caustic-Neutralizing Adsorbent kits valued at \$2,880 total. H. One (1) Build-A-Berm Barrier Kit valued at \$760. I. Twelve (12) HAZMAX Regular Steel Toe Boots (various sizes) valued at \$1,800 total. J. Three (3) Safe N' Clean™ SplashGuard Level D Coveralls (various sizes) valued at \$690 total.
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1	APPENDIX H (continued)
2	South Davis Metro Fire Service Area (Salt Lake City Refinery) (continued)
3	M. Four (4) Non-sparking shovels valued at \$300 total.
4 5	N. One (1) DrainBlocker Drain Cover and carrying bag valued at \$575.
6	O. Eight (8) cases of PR40 All-Purpose Wipers valued at \$880 total.
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8	P. Four (4) HazMat Mat Pads valued at \$480 total.
9	Q. Eight (8) Oil-Only Absorbent Mat Pad in Dispenser Boxes valued at \$600 total.
10	R. Ten (10) Oil-Only Absorbent Booms valued at \$1,250 total.
11	S. Eleven (11) EconoMax Booms valued at \$6,600 total.
12	T. One hundred and eight (108) Lite-Dri Loose Absorbent kits valued at \$2,160 total.
13	U. Four (4) Simplex [™] Booms valued at \$4,000 total.
1415	V. One (1) pallet truck valued at \$375.
16	W. One (1) stowaway platform valued at \$360.
17	X. Four (4) Light Tower LED M18 Rocket Charger Kits valued at \$2,260 total.
18	Y. One (1) T-Post Driver valued at \$55.
19	Z. Twenty (20) 5' T-Posts valued at \$140 total.
2021	AA. Ten (10) Vista Elite Paddle Vest personal flotation devices valued at \$800 total.
22	AB. Four (4) Carlisle Econ T-Grip Canoe Paddles 48" Black valued at \$120 total.
23	AC. One (1) Lowe L1032 Jon Boat valued at \$700.
24	AD. One (1) Thermo Scientific Gemini Handheld Analyzer valued at \$106,322.85.
25	TOTAL EQUIPMENT COST FOR THE SOUTH DAVIS METRO FIRE SERVICE
26	AREA: Approximately \$278,059.32
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APPENDIX H (continued) 1 8. Description of Project – Salt Lake City Fire Department 2 3 Purchase of emergency response equipment to be owned and used by the Salt Lake City Fire Department. 4 **Scheduling:** 5 6 CUSA intends to order the equipment described below for the Salt Lake City Fire Department within one hundred eighty (180) Days following the Effective Date. Dependent on supplier 7 capabilities, CUSA expects delivery within a reasonable time after the orders are placed. The SEP will be considered complete when each piece of equipment described below, or 8 substantially similar equipment in the event the equipment listed below is not available, is 9 delivered to the Salt Lake City Fire Department. If necessary, substantially similar equipment will be purchased by CUSA after consultation with the Salt Lake City Fire Department. 10 A. One (1) Thermo Fisher TruDefender FTXi Handheld FTIR for chemical identification with 11 three year warranty and service plan valued at \$69,500. 12 B. One (1) Thermo Fisher FirstDefender RMS Handheld Chemical Identification with three 13 year warranty and service plan valued at \$65,000. 14 C. Eight (8) DuPont TK Tykem 10000 1991-1994 certified level A suits valued at \$14,400 total. 15 D. One (1) Smith Detection LCD 3.3 chemical warfare agent and toxic industrial chemical 16 detector valued at \$10,000. 17 E. Two (2) Strategic Response Solutions Enhanced Decontamination Systems valued at 18 \$8,869.21 total. 19 F. Two (2) Strategic Response Solutions Synthetic Opioid decon modules valued at \$3,411.73 20 total. 21 G. One (1) Kelso emergency rail response kit valued at \$16,000. 22 H. One (1) Tanker tourniquet spill 911 valued at \$868.32. 23 I. One (1) Magrite patch system MagPatch 6 valued at \$10,567.65. 24 J. One (1) Chlorine Institute Cylinder Emergency Kit A valued at \$2,741.32. 25 26 K. One (1) Chlorine Institute Cylinder Emergency Kit B valued at \$2,792.27. 27 L. Two (2) DuPont Universal Pressure Test kits valued at \$4,339.92 total. 28

1	APPENDIX H (continued)
2	Salt Lake City Fire Department (continued)
3	M. One (1) Indian Springs Ammonia Cylinder Emergency Kit-NH valued at \$2,872.20.
4	N. Two (2) Class D 30lb. extinguishers valued at \$2,000 total.
5	O. Two (2) Purple K 20-30lb. extinguishers valued at \$1,800 total.
6 7	P. One (1) Hazcat kit 2.0 resupply valued at \$1,800.
8	Q. Ten (10) PhaseCore XPC Cooling Vests valued at \$5,000 total.
9	R. Two (2) C03-0910-000 RAE Systems Gamma Radiation Sensors valued at \$2,068.98 total.
10	S. Forty (40) Flash approved coveralls (various sizes) valued at \$8,000 total.
11 12	TOTAL EQUIPMENT COST FOR THE SALT LAKE CITY FIRE DEPARTMENT: Approximately \$232,031.60
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14	GRAND TOTAL SEP EQUIPMENT COST: Approximately \$10,000,000.
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