IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH CAROLINA CHARLESTON DIVISION

	CHARLESTON DIVISION	•
UNITED STATES OF AMI	ERICA,	C
	Plaintiff,	
v. 3V SIGMA USA, INC.,		Civil No. 2:23-cv-01832-DCN
	Defendant.	ζ.
	CONSENT DECREE	

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Plaintiff United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), has filed a complaint in this action concurrently with this Consent Decree, alleging that Defendant, 3V Sigma USA, Inc. ("3V" or "Defendant"), violated Section 112 of the Clean Air Act ("Act"), 42 U.S.C. § 7412, and its implementing regulations at 40 C.F.R. Part 63, Subpart FFFF (the "MON") and Subpart A.

WHEREAS, Defendant owns and operates a chemical manufacturing facility located at 888 Woodstock Road, Georgetown, South Carolina (the "Facility"), including equipment used to control emissions of hazardous air pollutants generated by the manufacturing processes run in Covered Process Units;

WHEREAS, on February 24, 2020, EPA sent Defendant a letter ("the February 2020 Letter") identifying potential violations of the MON, or areas of concern, at the Facility;

WHEREAS, the Complaint against Defendant alleges that 3V has violated the Act and its implementing regulations at the Facility by, among other things: (1) failing to properly monitor and repair equipment leaking hazardous air pollutants; (2) failing to properly characterize and control wastewater streams; (3) failing to properly operate its closed vent system to direct emissions to a control device or, in the alternative, failing to operate in accordance with good air pollution control practices to minimize emissions; and (4) failing to properly report information required by 40 C.F.R. 63.2520(e)(10) for certain MON processes run at the Facility.

WHEREAS, Defendant represents it has undertaken actions to reduce emissions from the Covered Process Units and the Facility by among other things:

- (1) Upgrading the onsite steam stripper;
- (2) Identifying points of determination for process wastewater streams generated by MON processes subject to 40 C.F.R. Part 63, Subpart FFFF and Subpart G (as incorporated into

Subpart FFFF);

- (3) Purchasing and using LDAR compliance management software;
- (4) Submitting revised notices of compliance status (NOCS) reports; and
- (5) Ceasing operation of certain Covered Process Units.

WHEREAS, Defendant has already undertaken some actions required by this Consent Decree to come into compliance with the Act.

WHEREAS, Defendant denies it has violated or continues to violate any of the statutory and regulatory requirements referenced in this Consent Decree and the preceding clauses and denies any liability to the United States arising out of the occurrences alleged in the Complaint.

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 between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

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 I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to Section 113(b) of the Act, and 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because the violations alleged in the Complaint are alleged to have occurred in, and Defendant conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court's jurisdiction over

this Decree and any such action, and over Defendant, and Defendant consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted.

II. APPLICABILITY

- 3. The obligations of this Consent Decree apply to and are binding upon the United States, and upon Defendant and any successors, assigns, or other entities or persons otherwise bound by law.
- 4. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of the Decree are implemented. At least 30 Days prior to such transfer, Defendant shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA, DOJ, and the United States Attorney for the District of South Carolina, in accordance with Section XVI (Notices). Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Decree.
- 5. Defendant shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree.

 Defendant shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

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

III. DEFINITIONS

- 7. Terms used in this Consent Decree, including the Appendices hereto, that are defined in the Act or in regulations promulgated pursuant to the Act have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions apply:
 - a. "Annual" or "Annually" shall mean a calendar year, except as otherwise provided in applicable regulatory provisions.
 - b. "CAP" shall mean any Corrective Action Plan described in this Consent

 Decree and its Appendices.
 - c. "Complaint" means the complaint filed by the United States in this action.
 - d. "Consent Decree" or "Decree" means this Decree and all appendices attached hereto listed in Section XXVII (Appendices), but in the event of any conflict between the text of this Consent Decree and any Appendix, the text of this Consent Decree shall control.
 - e. "Covered Process Units" shall mean all Process Units at the Facility that run processes subject to 40 C.F.R. Part 63, Subpart FFFF.
 - f. "Date of Lodging" shall mean the date that the United States files a "Notice of Lodging" of this Consent Decree with the Clerk of this Court for the purpose of providing notice and comment to the public.
 - g. "Day" means a calendar day unless expressly stated to be a business day.

In computing any period of time for a deadline under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period runs until the close of business of the next business day.

- h. "Defendant" or "3V" means 3V Sigma USA, Inc.
- i. "DOJ" means the United States Department of Justice and any of its successor departments or agencies.
- j. "EPA" means the United States Environmental Protection Agency and any of its successor departments or agencies.
 - k. "Effective Date" means the definition provided in Section XVII;
- "Facility" shall mean 3V's chemical manufacturing facility located at 888
 Woodstock Road, Georgetown, South Carolina.
- m. "LDAR" or "Leak Detection and Repair" shall mean the leak detection and repair activities required by any applicable "equipment leaks" provisions of 40 C.F.R. Part 63, Subpart FFFF.
- n. "Method 21" shall mean the test method found at 40 C.F.R. Part 60, Appendix A-7, Method 21. To the extent that the Covered Equipment is subject to regulations that modify Method 21, those modifications shall be applicable.
- o. "MON Process" shall mean a Process, within the meaning of 40 C.F.R. § 63.2550(i), run at the Facility that is subject to Subpart FFFF.
- p. "Month" or "Monthly" shall mean a calendar month, except as otherwise provided in any applicable LDAR provisions.
- q. "Optical Gas Imaging Instrument" or "OGI" shall mean an instrument that images a gas cloud, not visible to the naked eye, and can absorb/emit radiant energy at

the waveband of the infrared camera. The waveband must contain at least the range of 3.2 to 3.4 micrometers.

- r. "Paragraph" means a portion of this Decree identified by an Arabic numeral.
 - s. "Parties" means the United States and Defendant.
- t. "Process Unit" shall mean "miscellaneous organic chemical manufacturing process unit" at the Facility as defined in 40 CFR 63, Subpart FFFF.
- u. "Quarter" or "Quarterly" shall mean a calendar quarter (January through March, April through June, July through September, or October through December), except as otherwise provided in any applicable regulatory provision.
- v. "Screening Value" shall mean the highest emission level that is recorded at each piece of Covered Equipment and/or each Waste Management Unit ("WMU")

 Vent and associated components as it is monitored in compliance with Method 21.
 - w. "Section" means a portion of this Decree identified by a Roman numeral;
- x. "Subpart FFFF" shall mean 40 C.F.R. Part 63, Subpart FFFF (National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing).
- y. "United States" means the United States of America, acting on behalf of EPA.

IV. CIVIL PENALTY

8. Within 90 Days after the Effective Date, Defendant shall pay the sum of \$731,250 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.

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

Kathryn Dismukes, CFO 3V Sigma USA, Inc. 888 Woodstock Street Georgetown, South Carolina 29440 k.dismukes@3VSigmaUSA.com

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

- 10. At the time of payment, Defendant shall send notice that payment has been made: (i) to EPA via email at cinwd_acctsreceivable@epa.gov or via regular mail to EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; (ii) to DOJ via email or regular mail in accordance with Section XVI; and (iii) to EPA via electronic correspondence in accordance with Section XVI. Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States v. 3V Sigma USA, Inc.*, and shall reference the civil action number, CDCS Number and DOJ case number 90-5-2-1-12383.
- 11. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section X (Stipulated Penalties) in calculating its federal income tax.

V. COMPLIANCE REQUIREMENTS

12. Defendant shall perform the measures set forth in Appendix A, Appendix B, and Appendix C of this Consent Decree at the Facility.

VI. COMPLIANCE EVALUATION AND AUDIT REQUIREMENTS

- 13. In accordance with Appendices A–C, Defendant shall hire Independent Third Parties to conduct environmental compliance evaluations or audits at the Facility. Defendant shall bear all costs associated with the Independent Third-Party evaluations or audits, cooperate fully with the Independent Third-Party consultant, and provide the consultant with reasonable and timely access to all records, employees, contractors, units, and facilities that the consultant deems necessary to effectively perform the duties described in this Section and in Appendices A–C.
- 14. The Independent Third Parties shall be informed of and be required by contract to comply with all applicable workplace safety and health procedures while onsite at the Facility.
- 15. Representatives of Independent Third Parties responsible for overseeing the duties set forth in this Section and in Appendices A (LDAR Requirements), B (Storage Tanks and Closed Vent System Requirements), and C (Wastewater Requirements) of this Consent Decree shall:
 - a. have a bachelor's or equivalent degree in a relevant discipline and a license in professional engineering;
 - b. have expertise and competence in the relevant regulatory programs under federal and state environmental laws, and at least five (5) years of experience, including current experience and training, with the requirements of relevant laws and permits; and

- c. have conducted audits covering these regulatory programs within the last five (5) years.
- 16. To ensure independence, each Independent Third Party and its personnel, or subcontractors, that perform duties pursuant to this Consent Decree shall act impartially when performing all activities under this Section and Appendices A–C. To demonstrate independence and impartiality, Defendant shall have no financial interest in the Independent Third Party and shall require in the auditing contract with the Independent Third Party, that:
 - a. The Independent Third Party, and its personnel or subcontractors performing the audit work, shall not have any conflict of interest that will compromise, in any way, the independence of the evaluation or audit;
 - b. The Independent Third Party, and its personnel or subcontractors performing the audit work, shall not have conducted past research, development, design, construction services, or consulting for the Defendant within the last three (3) years prior to the auditing contract, and not have worked at the Facility during the last five (5) years. For purposes of this Section, the term "consulting" shall not include performing or participating in other third-party audits or evaluations required by this Consent Decree;
 - c. The Independent Third Party, and its personnel or subcontractors performing the audit work, shall not provide other business or consulting services to Defendant, including advice or assistance to implement the findings or recommendations in the audit report(s), for a period of at least three (3) years following the Independent Third Party's submittal of the final audit report(s) without the prior written consent of EPA;
 - d. All Independent Third-Party personnel who conduct or otherwise

participate in the evaluation/audit sign and date a conflict of interest statement, prior to participating in or conducting the evaluation or audit, attesting that the personnel:

- (1) have met and followed the Independent Third-Party requirements in this Section VI, Paragraph 16; and
- (2) receive no financial benefit from the outcome of the evaluation or audit, apart from payment for the performance of such evaluation or audit services;
- e. Defendant shall not hire as an employee or consultant any of the Independent Third Party's personnel, or contractors retained by the Independent Third Party, who conducted or otherwise participated in the evaluation/audit during the period of the evaluation/audit and for a period of at least two (2) years following the Independent Third Party's submittal of its final audit report(s) without the prior written consent of EPA;
- f. The Independent Third Party shall retain for five (5) years after completion of its final audit report(s), and if directed by Defendant shall produce for Defendant, and for EPA, copies of any of the evaluation or audit-related reports and records specified in this Section; and
- g. The Independent Third Party shall have in place policies and procedures to memorialize conditions (a) through (f), above, to ensure the Independent Third Party's competence, impartiality, judgment, and operational integrity when auditing under this Section.
- 17. <u>Selection of the Independent Third Party</u>. For each evaluation or audit required by this Consent Decree, Defendant shall submit to EPA a list of two (2) or more proposed

consultants to serve as an Independent Third Party, along with the name, affiliation, and address of the proposed Independent Third Party, information demonstrating how each proposed auditor satisfies the requirements of Paragraphs 15 and 16, and a description of any previous work, contracts, or financial relationships with Defendant in the prior ten (10) years. Defendant shall state whether a proposed Independent Third Party is proposed to conduct more than one evaluation or audit or whether more than one Independent Third Party will participate on a single evaluation or audit. If, despite best reasonable efforts, Defendant cannot identify two (2) proposed Independent Third Parties that meet all requirements of Paragraphs 15 and 16, Defendant shall so certify with an explanation of the efforts it has made to locate such Independent Third Parties, and shall submit to EPA a list of two (2) or more proposed candidates to serve as an Independent Third Party, along with the information required under this Paragraph demonstrating that the candidates can perform the duties under this Section in an independent manner, and an explanation of which requirements of Paragraphs 15 and 16 are met and which are not met by each candidate. Defendant has submitted to EPA a list of proposed consultants to serve as an Independent Third Party for each evaluation or audit required by this Consent Decree, for the purposes of complying with this Paragraph.

a. EPA shall notify Defendants regarding whether it approves the proposed Independent Third-Party consultant(s) on the list(s). If EPA does not approve any of the proposed consultants on Defendant's list, then Defendant shall submit a second, and if necessary third list of proposed consultants to EPA within thirty (30) Days of receipt of EPA's written notice of its disapproval of proposed consultants on the list. If EPA has not approved a proposed consultant on the first, second or third lists submitted by Defendant and the Parties are unable to agree on a proposed consultant, the Parties agree

to resolve the selection of Independent Third Parties through the Dispute Resolution process in Section XII.

- b. Within 60 Days after receipt of EPA's approval, Defendant shall select one consultant from those approved by EPA for the particular evaluation(s) or audit(s) and shall enter into a contract with the consultant to serve as Independent Third Party and to perform all the duties required for the particular evaluation(s) or audit(s) as required by this Consent Decree. Defendant shall use all commercially reasonable efforts to ensure that the Independent Third Party complies with the requirements set forth in this Decree, including the deadlines established thereunder and in approved schedules. Defendant's retention contract with the Independent Third Party shall include enforceable obligations paralleling applicable Consent Decree requirements and shall include remedies, including penalties, for nonperformance or delayed performance by the Independent Third Party. In the event the consultant(s) approved by EPA is no longer available or willing to accept the work described in this Consent Decree when notified of their selection by Defendant, then Defendant shall select another auditor approved by EPA and enter into the contract to perform the relevant evaluation(s) or audit(s) within sixty (60) Days.
- c. If, after retention by Defendant, the selected Independent Third Party cannot satisfactorily perform the evaluation or audit, then within sixty (60) Days of learning that the Independent Third Party cannot satisfactorily perform the evaluation or audit, Defendant shall submit a list of proposed replacement Third Parties to EPA for approval in accordance with this Paragraph.
- 18. Upon receipt of written notice from the Independent Third Party, Defendant shall immediately notify EPA of any condition the Independent Third Party finds during an evaluation

or audit that may present an imminent and substantial endangerment to public health, welfare, or the environment. Defendant's contract with the Independent Third Party shall require the Independent Third Party to cooperate fully with any requests made by Defendant or EPA in investigating the potential endangerment. Defendant shall cooperate fully with any requests made by EPA in investigating the potential endangerment. Nothing in this paragraph shall relieve Defendant of any other obligation imposed by any applicable federal, state, tribal, or local law or order requiring notification or response to the potential endangerment. The notification requirement of this paragraph is in addition to and shall not substitute for any such obligation.

- 19. <u>General Evaluation or Audit Report Requirements</u>. In addition to the specific requirements for each third-party evaluation or audit set forth under this Consent Decree,

 Defendant's contract with the Independent Third Party shall require the Independent Third Party to include, as part of its final report after completion of the evaluation or audit, the following:
 - a. the dates of the evaluation or audit;
 - b. a description of the information reviewed and the on-site activities conducted by the Independent Third Party to perform the audit in accordance with this Consent Decree and the applicable Appendix;
 - c. a detailed description of each suspected area of noncompliance ("AON") found at the Facility within the applicable Appendices, including the suspected days of noncompliance, if known, with the legal requirement;
 - d. supporting data and information documenting each suspected AON, such as analytical data, schematic diagrams and photographs, environmental permits, monitoring data, and invoices of installed equipment;
 - e. a recommendation on what corrective measures need to be taken to

address each suspected AON;

- f. a description of any problems or difficulties, if any, in performing the evaluation or audit and the measures taken to address such problems or difficulties at the Facility; and
- g. a certification by the Independent Third Party that the evaluation or audit has been fully completed in accordance with the relevant provisions of this Consent Decree.
- 20. Defendants shall provide a copy of any final evaluation or audit report(s) to EPA as set forth in the Appendices.

VII. APPROVAL OF DELIVERABLES

- 21. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Consent Decree, EPA will in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.
- 22. If the submission is approved pursuant to Paragraph 21(a), Defendant shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part pursuant to Paragraph 21(b) or (c), Defendant shall, upon written direction from EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions.
- 23. If the submission is disapproved in whole or in part pursuant to Paragraph 21 (c) or (d), Defendant shall, within 45 Days or such other time as the Parties agree to in writing,

correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Defendant shall proceed in accordance with the preceding Paragraph.

- 24. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require Defendant to correct any deficiencies, in accordance with the preceding Paragraphs, or may itself correct any deficiencies.
- 25. If Defendant elects to invoke Dispute Resolution as set forth in Section XII (Dispute Resolution) concerning a decision by EPA to disapprove, approve on specified conditions, or modify a deliverable, Defendant shall do so by sending a Notice of Dispute in accordance with Paragraph 57 within 30 Days (or such other time as the Parties agree to in writing) after receipt of the applicable decision.
- 26. Any stipulated penalties applicable to the original submission, as provided in Section X, accrue during the 45 Day period or other specified period, but shall not be payable unless the resubmission required by this Consent Decree is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Defendant's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

VIII. PERMITS

27. Where any compliance obligation under this Consent Decree requires Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

Defendant may seek relief under the provisions of Section XI (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendant has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals. Defendant shall provide notice to EPA pursuant to Section XVI (Notices) that Defendant has submitted an application for the Facility for any permit described in this Paragraph.

IX. REPORTING REQUIREMENTS

- 28. Defendant shall submit the following reports to EPA, at the addresses set forth in Section XVI (Notices):
 - a. By July 31st and January 31st of each year after the entry of this Consent

 Decree, until termination of this Decree pursuant to Section XX, Defendant shall submit
 a semi-annual report for the preceding six months that includes: a description of each
 requirement of this Consent Decree and its Appendices (or any submission made
 thereunder) that was completed during the reporting period, including the date such
 requirement was completed; all information required to be reported in the Compliance
 Status Report under Appendices A through C of this Consent Decree; and a description of
 any problems anticipated with respect to meeting the requirements of Sections V–VIII of
 this Consent Decree, together with implemented or proposed solutions.
 - b. The report shall also include a description of any non-compliance with the requirements of this Consent Decree (including its Appendices) and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If Defendant violates, or has reason to believe that it may

violate, any requirement of this Consent Decree, Defendant shall notify DOJ and EPA of such violation and its likely duration, in writing, within ten business days of the Day Defendant first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant shall so state in the report. Defendant shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendant becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant of its obligation to provide the notice required by Section XI (Force Majeure).

- 29. Whenever any violation of this Consent Decree or any other event affecting Defendant's performance under this Decree may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA by telephone at (404) 562-9194 and by electronic mail as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.
- 30. Each report submitted by Defendant under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- 31. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.
- 32. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.
- 33. The reporting requirements of this Section are in addition to any other reports, plans, or submissions required by other Sections of, or Appendices to, this Consent Decree.
- 34. 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.

X. STIPULATED PENALTIES

- 35. Defendant shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section XI (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.
- 36. <u>Late Payment of Civil Penalty</u>. If Defendant fails to pay the civil penalty required to be paid under Section IV (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$5,000 per Day for each Day that the payment is late.
- 37. <u>Compliance Requirements</u>. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements identified in Section V (Compliance

Requirements) (including Appendices A–C), and Section VI (Compliance Evaluation and Audit Requirements) of this Consent Decree:

a. <u>Leak Detection and Repair</u> (Appendix A). For the purposes of this subparagraph, unless otherwise specified, the term Paragraph shall refer to a Paragraph in Appendix A.

Leak Detection and Repair (Appendix A)			
Consent Decree Violation	Stipulated Penalty		
i. <u>Paragraph 2 (Facility-</u> <u>Wide LDAR Program)</u> : Failure to	Period of Noncompliance	Penalty per Day late	
timely develop and complete a written LDAR plan or failure to timely update the plan after each LDAR Audit.	1 – 15 Days 16 – 30 Days 31 Days or More	\$300 \$400 \$500	
ii. Paragraph 3 (LDAR Resource Allocation Plan): Failure	Period of Noncompliance	Penalty per Day late	
to timely develop and complete a written LDAR Resource Allocation Plan or failure to timely update the plan after each LDAR Audit.	1 – 15 Days 16 – 30 Days 31 Days or More	\$300 \$400 \$500	
iii. <u>Paragraphs 4–6</u> (<u>Monitoring Frequency</u>): Each failure to perform monitoring at the frequencies specified in Paragraphs 4–6.	\$100 per component per missed monitoring event, not to exceed \$25,000 per 30-Day period per Covered Process Unit.		
iv. Paragraph 7 (Method 21): Each failure to comply with Method 21 and the requirements of	Monitoring Frequency for the component Annual or Biennial	Penalty per monitoring event per Process Unit \$20,000	
Paragraph 7 in performing LDAR monitoring.	Quarterly Monthly	\$10,000 \$5,000	
v. <u>Paragraph 8 (Use of Data Logger)</u> : For each failure to use a monitoring device that is attached to a data logger (or an equivalent instrument or application), and for	\$100 per failure per piece monitored	of Covered Equipment	

each failure, during each monitoring event, to directly electronically record the Screening Value, date, time, and identification number of the monitoring instrument, and the identification of the technician. vi. Paragraph 8 (Monitoring Data Transfer): Each failure to transfer monitoring data to electronic database on at least a weekly basis.	\$150 per Day for each		
vii. Paragraph 13 (First Attempt at Repair): Each failure to timely perform a first attempt at repair as required by Paragraph 13. For purposes of these stipulated penalties, the term "repair" includes the required Repair Verification Monitoring in Paragraph 14 after the repair attempt. If stipulated penalties are collected under this subparagraph, the stipulated penalties in Paragraph 37.a.ix do not apply.	\$150 per Day for each per missed repair.	late Day, not to	exceed \$1,500
viii. Paragraph 13 (Final Attempt at Repair): Each failure to timely perform a final attempt at repair as required by Paragraph 13 unless not required to do so under Paragraph	Equipment Type Valves/Connectors Pumps	Penalty per component per Day late \$300 \$1,200	Not to exceed \$45,000 \$150,000
17 (Delay of Repair). For purposes of these stipulated penalties, the term "repair" includes the required Repair Verification Monitoring in Paragraph 14 after the repair attempt. If stipulated penalties are collected under this subparagraph,			

the stipulated penalties in Paragraph 37.a.ix do not apply.			
ix. <u>Paragraph 14 (Repair Verification Monitoring):</u> Each failure to timely perform Repair Verification Monitoring as required by Paragraph 14 in circumstances	Equipment type	Penalty per component per Day late	Not to exceed
where the first attempt to repair the piece of equipment to eliminate the Leak was made within 5 Days and the final attempt to repair the piece of equipment to eliminate the Leak was made within 15 Days.	Valves/Connectors Pumps	\$150 \$600	\$18,750 \$75,000
x. <u>Paragraph 17 (Delay of</u> <u>Repair)</u> : Each improper placement of a piece of Covered Equipment on the DOR list (e.g., placing a piece	Equipment type	Penalty per component per Day on DOR list	Not to exceed
of Covered Equipment on the DOR list even though it is feasible to	Valves/Connectors Pumps	\$300 \$1,200	\$75,000 \$300,000
repair it without a Process Unit Shutdown) required by Paragraph 17.			
xi. Paragraph 17.a (Supervisor Sign-Off for Delay of Repair): Each failure to comply with the requirement that a relevant supervisor sign off on placing a piece of Covered Equipment on the DOR list.	\$250 per piece of Cove		
xii. Paragraph 17.d (Repair of Devices on Delay of Repair): Each failure to comply with the requirements of Paragraph 17.d.	Refer to applicable stipulated penalties in Paragraphs 37.a.vii and viii.		
xiii. Paragraph 17.e (Valve / Connector Replacement and Improvement on Delay of Repair):	Refer to applicable stipulated penalties in Paragraph 37.a.xvi.		

Each failure to comply with the	
requirements of Paragraph 17.e.	
xiv. Paragraph 20 (Work	\$50 per violation per valve per Day, not to exceed
<u>Practices</u>): Each failure to comply	\$30,000 for all valves in a Covered Process Unit per
with the work practice standards in	Quarter.
Paragraph 20.	
xv. Paragraph 21 (Installing	\$20,000 per failure, except as provided in Paragraph 38,
New Valves): Each failure to install	below.
a Low-E Valve or a valve fitted	
with Low-E Packing when required	
to do so under Paragraph 21.	
xvi. <u>Paragraph 22.b</u>	\$500 per Day per failure, not to exceed \$20,000 per
(Replacement or Repacking): Each	failure, except as provided in Paragraph 38, below.
failure, in violation of Paragraph	
22.b, to timely comply with the	
requirements to install a Low-E	
Valve or Low-E Packing if a	
Process Unit Shutdown is not	
required.	
xvii. <u>Paragraph 27.b</u>	\$100 per Day per failure, not to exceed \$5,000 per
(Replacing or Improving	failure.
Connectors): Each failure to timely	
comply with the requirements	
regarding the replacement,	
improvement, or repair	
requirements for connectors under	
Paragraph 27.b.	
xviii. Paragraph 28 (Covered	\$300 per piece of Covered Equipment.
Equipment Addition): Each failure	
to add a piece of Covered	
Equipment to the LDAR Program	
when required to do so pursuant to	
the evaluation required by Paragraph 28.	
	\$150 per failure per piece of Cayland Equipment
xix. Paragraph 28 (Covered	\$150 per failure per piece of Covered Equipment.
Equipment Deletion): Each failure to remove a piece of Covered	
Equipment from the LDAR	
Equipment nom me LDAK	

Program when required to do so			
pursuant to Paragraph 28.			
xx. Paragraph 29 (Training	\$50 per Day late.		
<u>Protocol</u>): Each failure to timely			
develop a training protocol as			
required by Paragraph 29.			
xxi. <u>Paragraph 29 (LDAR</u>	\$1,000 per person per m	onth late.	
Personnel Training): Each failure to			
perform initial, refresher, or new			
LDAR Personnel training as			
required by Paragraph 29.			
xxii. <u>Paragraphs 30–31 (Daily</u>	\$1,000 per missed requi	rement per quarter.	
Certification and QA/QC): Each			
failure to perform any of the			
requirements relating to daily			
certification or QA/QC in			
Paragraphs 30–31.			
xxiii. <u>Paragraphs 32 and 32.a</u>	Period of	Penalty per Day late	
(LDAR Audits Schedule): Each	noncompliance	renalty per Day late	
failure to conduct an LDAR Audit	1 – 15 Days	\$300	
at the Facility in accordance with	16 – 30 Days	\$400	
the schedule set forth in Paragraphs	31 Days or More	\$500, not to exceed	
32 and 32.a.		\$100,000 per LDAR Audit	
xxiv. Paragraphs 32 and 32.a	\$50,000 per LDAR Aud	it.	
(LDAR Auditor Selection): Each			
failure to use a third-party auditor			
as required under Paragraphs 32			
and 32.a which meets the			
requirements under Section VI of			
the Decree (Compliance Evaluation			
and Audit Requirements).			

xxv. Paragraph 32.b (Audit Scope and Content): Except where comparative monitoring is required under Paragraph 33, each failure to comply with the requirements of Paragraph 32.b. xxvi. Paragraph 33 (Comparative Monitoring): Each failure to comply with the Comparative Monitoring requirements of Paragraph 33.	\$100,000 per LDAR Aud	
xxvii. Paragraph 35 (Audit Report): Each failure to timely	Period of noncompliance	Penalty per Day late
submit an LDAR Audit Report that meets all requirements of Paragraph 35.	1 – 15 Days 16 – 30 Days 31 Days or More	\$300 \$400 \$500
xxviii. <u>Paragraph 36.a</u> (<u>Corrective Action</u>): Each failure to	Period of noncompliance	Penalty per Day Late
implement a corrective action within 90 Days after submission of the LDAR Audit Report or pursuant to the schedule that 3V must propose under Paragraph 36.c if the corrective action cannot be completed in 90 Days.	1 – 15 Days 16 – 30 Days 31 Days or More	\$500 \$750 \$1,000 per Day, not to exceed \$200,000 per LDAR Audit
xxix. <u>Paragraphs 36.b–c</u> (Corrective Action Plan Submittal):	Period of noncompliance	Penalty per Day late
Each failure to timely submit a Preliminary or Final Corrective Action Plan that conforms to the requirements of Paragraphs 36.b–c.	1 – 15 Days 16 – 30 Days 31 Days or More	\$100 \$250 \$500, not to exceed \$100,000 per LDAR Audit
xxx. <u>Paragraph 37</u> (Certification of Completion): Each	Period of noncompliance	Penalty per Day late
failure to timely submit a Certification of Completion that conforms to the requirements of Paragraph 37.	1 – 15 Days 16 – 30 Days 31 Days or More	\$100 \$200 \$500, not to exceed \$75,000

xxxi. Paragraph 38 (Recordkeeping Requirements): Each failure to comply with any	Period of noncompliance	Penalty per Day late
recordkeeping, submission, or	1 – 15 Days	\$100
reporting requirement in Paragraph	16 – 30 Days	\$250
38 not specifically identified above	31 Days or More	\$500
in this Table.		

b. <u>Storage Tanks and Closed Vent Systems</u> (Appendix B). For the purposes of this subparagraph, unless otherwise specified, the term Paragraph shall refer to a Paragraph in Appendix B.

Storage Tanks and Closed Vent Systems (Appendix B)			
Consent Decree Violation	Stipulated Penalty		
i. Paragraphs 2–4 (Tank PMOP):	Period of Noncompliance	Penalty per Day late	
Failure to timely develop and	1 – 15 Days	\$300	
submit a written Tank PMOP that	16 – 30 Days	\$400	
meets all requirements of	31 Days or More	\$500	
Paragraphs 2-4.			
ii. Paragraph 6 (Tank PMOP	Period of Noncompliance	Penalty per Day late	
Compliance): Each failure to	1 – 15 Days	\$300	
comply with any requirement of the	16 – 30 Days	\$500	
Tank PMOP, as required by	31 Days or More	\$700	
Paragraph 6.			
iii. Paragraph 7 (Tank PMOP Review	Period of Noncompliance	Penalty per Day late	
and Update): Each failure to	1 – 15 Days	\$300	
Review or Update the Tank PMOP	16 – 30 Days	\$400	
at least once each calendar year, as	31 Days or More	\$500	
required by Paragraph 7.			
iv. Paragraph 8 (Closed Vent System	Period of Noncompliance	Penalty per Day late	
and Storage Tank Audit Schedule):	1 – 15 Days	\$300	
Each failure to conduct an audit of	16 – 30 Days	\$400	
the Facility's Group 1 Storage	31 Days or More	\$500	
Tanks and Closed Vent Systems in			
accordance with the schedule set			

forth in Paragraph 8.		
v. Paragraph 8 (Auditor Selection): Each failure to use a third-party auditor as required under Paragraph 8 which meets the requirements under Section VI of the Decree (Compliance Evaluation and Audit Requirements).	\$50,000 per Audit.	
vi. Paragraph 9 (Audit Scope and Content): Each failure to comply with the requirements of Paragraph 9.a–d.	\$100,000 per Audit	
vii. Paragraphs 10 (OGI Inspection Requirements): Each failure to conduct OGI monitoring of Covered Equipment in accordance with the requirements of Paragraph 10.	Missed or untimely event \$7,000 Failure to comply with \$3,500 OGI requirements (e.g., Camera operating parameters)	
viii. Paragraph 11 (Repair of Equipment Leaks Identified in Audit): The applicable Appendix A LDAR stipulated penalties shall apply for each failure to repair equipment as required by Paragraph 11, incorporating the requirements of Appendix A Paragraphs 9–27, 30, and 31.	LDAR Appendix A stipulated penalties table (above).	
ix. Paragraph 12 (Closed Vent System and Storage Tank Audit Report): Each failure to follow any requirement of Paragraph 12 for preparing and submitting Draft and Final Storage Tank Reports.	Period of Noncompliance 1 – 15 Days 16 – 30 Days 31 Days or More	Penalty per Day late \$300 \$400 \$500
x. Paragraph 13 (WMU Vent Leak Detection and Repair): The applicable Appendix A LDAR	Applicable stipulated penalty amounts from the LDAR Appendix A stipulated penalties table (above).	

each failure to comply with the requirements of the Plan as required by Paragraph 13, incorporating the requirements of Appendix A Paragraphs 2, 3, 9–27, and 30–37.		
xi. Paragraph 13 (Compliance with	Period of Noncompliance	Penalty per Day late
Storage Tank and Closed Vent	1 – 15 Days	\$300
System Leak Detection and Repair	16 – 30 Days	\$400
<u>Plan</u>): Each failure to comply with	31 Days or More	\$500
the requirements of the Plan that is		
not separately incorporated through		
the requirements of Appendix A.		
xii. Paragraph 14 (Vapor Control	\$50,000 per Audit.	
System Evaluation – Auditor		
Selection): Each failure to use a		
third-party auditor as required		
under Paragraph 14 which meets		
the requirements under Section VI		
of the Decree (Compliance		
Evaluation and Audit		
Requirements).		
xiii.Paragraph 14 (Vapor Control	Period of Noncompliance	Penalty per Day late
System Evaluation - Audit	1 – 15 Days	\$300
Schedule): Each failure to conduct	16 – 30 Days	\$400
a Vapor Control System Evaluation	31 Days or More	\$500
Audit at the Facility in accordance		
with the schedule set forth in		
Paragraph 14.		
xiv.Paragraph 15 (Vapor Control	\$100,000 per Audit.	
System Evaluation – Audit Scope	-	
and Content): Each failure to		
comply with the requirements of		
Paragraph 15.		
xv. Paragraph 16 (Vapor Control	Period of Noncompliance	Penalty per Day late
System Evaluation – Audit Report):	1 – 15 Days	\$300
Each failure to timely submit an	16 – 30 Days	\$400
Audit Depart that meets all	•	\$500
Audit Report that meets all	31 Days or More	\$300

xvi. Paragraphs 17.a-c (Corrective	Period of Noncompliance	Penalty per Day late
Action Plan Submittal): Each	1 – 15 Days	\$100
failure to timely submit a	16 – 30 Days	\$250
Preliminary or Final Corrective	31 Days or More	\$500, not to exceed
Action Plan that conforms to the		\$100,000 per Audit
requirements of Paragraphs 17.a–c.		
xvii. Paragraph 17.c (Corrective Action):	Period of Noncompliance	Penalty per Day late
Each failure to implement a	1 – 15 Days	\$500
corrective action within 90 Days	16 – 30 Days	\$750
after submission of the Vapor	31 Days or More	\$1,000 per Day, not
Control System Evaluation Audit		to exceed \$200,000
Report or pursuant to the schedule		per Audit
that 3V must propose under		
Paragraph 17.c if the corrective		
action cannot be completed in 90		
Days.		
xviii. Paragraph 18 (Vapor Control	Period of Noncompliance	Penalty per Day late
System Verification): Each failure	1 – 15 Days	\$300
to comply with the requirements of	16 – 30 Days	\$400
Paragraph 18.	31 Days or More	\$500

c. <u>Wastewater</u> (Appendix C). For the purposes of this subparagraph, unless otherwise specified, the term Paragraph shall refer to a Paragraph in Appendix C.

Wastewater (Appendix C)		
Consent Decree Violation	Stipulated 1	Penalty
i. Paragraph 1 (Wastewater	\$50,000 per Audit.	
<u>Evaluations – Auditor Selection)</u> :		
Each failure to use a third-party		
auditor as required under Paragraph		
1 which meets the requirements		
under Section VI of the Decree		
(Compliance Evaluation and Audit		
Requirements).		
ii. Paragraph 1 (Wastewater	Period of Noncompliance	Penalty per Day late

Compliance Evaluation Plan):	1 – 15 Days	\$300
Failure to timely develop and	16 – 30 Days	\$400
complete a Wastewater Compliance	31 Days or More	\$500 per Day
Evaluation Plan.		, , , , , , , , , , , , , , , , , , ,
iii. Paragraph 1 (Subsequent	Period of Noncompliance	Penalty per Day late
Wastewater Evaluations): Each	1 – 15 Days	\$300
failure to evaluate within 60 days	16 – 30 Days	\$400
any MON Wastewater Stream not	31 Days or More	\$500 per Day
evaluated for Wastewater Stream		, , , , , ,
Group Status under the initial		
Evaluation required by Paragraph 2.		
iv. Paragraph 2 (Wastewater Group	Period of Noncompliance	Penalty per Day late
Status Evaluation - Schedule): Each	1 – 15 Days	\$300
failure to commence or complete	16 – 30 Days	\$400
the initial Wastewater Group Status	31 Days or More	\$500 per Day
Evaluation in accordance with the		
schedule set forth in Paragraph 2.		
v. Paragraph 2 (Wastewater Group	\$100,000 man Amilia	
Status Evaluation – Scope and	\$100,000 per Audit.	
Content): Each failure to comply		
with the requirements of Paragraph		
2.a-c.		
vi. Paragraph 2 (Wastewater Group	Period of Noncompliance	Penalty per Day late
Status Evaluation Report): Each	1 – 15 Days	\$300
failure to complete and submit a	16 – 30 Days	\$400
Wastewater Group Status	31 Days or More	\$500 per Day
Evaluation Report in accordance		
with the schedule set forth in		
Paragraph 2.d.		
vii. Paragraphs 3-4 (Wastewater	Period of Noncompliance	Penalty per Day late
<u>Control Evaluation - Schedule</u>):	1 – 15 Days	\$300
Each failure to commence or	16 – 30 Days	\$400
complete a required Wastewater	31 Days or More	\$500 per Day
Control Evaluation in accordance		
with the schedule set forth in		
Paragraph 4.		
viii. Paragraph 4 (Wastewater Control	\$100,000 por Avdit	
Evaluation – Scope and Content):	\$100,000 per Audit.	

Each failure to comply with the		
requirements of Paragraph 4.a–d.		
ix. Paragraph 4 (Wastewater Control	Period of Noncompliance	Penalty per Day late
Evaluation Report): Each failure to	1 – 15 Days	\$300
complete and submit a Wastewater	16 – 30 Days	\$400
Control Evaluation Report in	31 Days or More	\$500 per Day
accordance with the schedule set		1 ,
forth in Paragraph 4.e.		
x. Paragraphs 5.a-c (Corrective	Period of Noncompliance	Penalty per Day late
Action Plan Submittal): Each	1 – 15 Days	\$100
failure to timely submit a	16 – 30 Days	\$250
Preliminary or Final Corrective	31 Days or More	\$500
Action Plan that conforms to the	-	
requirements of Paragraphs 5.a-c.		
xi. Paragraph 5.c (Corrective Action):	Period of Noncompliance	Penalty per Day late
Each failure to implement a	1 – 15 Days	\$500
corrective action within 120 Days	16 – 30 Days	\$750
after submission of the Wastewater	31 Days or More	\$1,000 per Day
Control Evaluation Report or		
pursuant to the schedule that 3V		
must propose under Paragraph 5.c		
if the corrective action cannot be		
completed in 90 Days.		
xii. Paragraph 6 (Steam Stripper	Period of Noncompliance	Penalty per Day late
Compliance Evaluation): Failure to	1 – 15 Days	\$500
conduct any steam stripper	16 – 30 Days	\$750
performance test required by the	31 Days or More	\$1,000 per Day
terms of Paragraph 6, or to submit		
the results of the performance test		
in accordance with the schedule set		
forth in Paragraph 6.		
xiii.Paragraph 7.a-b (Process Change -	Refer to applicable stipulated penalties in	
Wastewater Evaluations): Each	Paragraphs 37.c. iii and v-	xi.
failure to comply with the		
requirements of Paragraph 7.a-b.		
xiv. Paragraph 7.c (Process Change -	Period of Noncompliance	Penalty per Day late

Notifications): Each failure to	1 – 15 Days	\$300
comply with the requirements of	16 – 30 Days	\$400
Paragraph 7.c.	31 Days or More	\$500 per Day
xv. Paragraph 8 (NOCS Report	Period of noncompliance	Penalty per Day late
<u>Updates</u>): Each failure to submit an	1 – 15 Days	\$300
updated NOCS Report required by	16 – 30 Days	\$400
the terms of Paragraph 8 in	31 Days or More	\$500 per Day
accordance with the schedule set		
forth in Paragraph 8.		
xvi. Paragraphs 10–11 (WMU PMOP):	Period of Noncompliance	Penalty per Day late
Failure to timely develop and	1 – 15 Days	\$300
submit a written WMU PMOP that	16 – 30 Days	\$400
meets all requirements of	31 Days or More	\$500 per Day
Paragraphs 10–11, if required under		
the terms of Paragraph 9.		
xvii. Paragraph 12 (WMU PMOP	Period of Noncompliance	Penalty per Day late
Compliance): Each failure to	1 – 15 Days	\$300
comply with any requirement of the	16 – 30 Days	\$400
WMU PMOP, as required by	31 Days or More	\$500 per Day
Paragraph 12.		
xviii. <u>Paragraph 13 (WMU PMOP</u>	Period of Noncompliance	Penalty per Day late
Review and Update): Each failure	1 – 15 Days	\$300
to Review or Update the WMU	16 – 30 Days	\$400
PMOP at least once each calendar	31 Days or More	\$500 per Day
year, in accordance with the		
schedule set forth in Paragraph 13.	A 1' 11 .' 1 . 1	1, 2 4
xix. Paragraph 14 (Monitoring of WMU	Applicable stipulated pena	•
Vents): The applicable Appendix A		
T D I D I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(1)	
LDAR stipulated penalties shall	(above).	
apply for each failure to conduct	(above).	
apply for each failure to conduct monitoring of WMU Vents and to	(above).	
apply for each failure to conduct monitoring of WMU Vents and to incorporate that monitoring into the	(above).	
apply for each failure to conduct monitoring of WMU Vents and to incorporate that monitoring into the LDAR Program and Resource	(above).	
apply for each failure to conduct monitoring of WMU Vents and to incorporate that monitoring into the LDAR Program and Resource Allocation Plan as required by	(above).	
apply for each failure to conduct monitoring of WMU Vents and to incorporate that monitoring into the LDAR Program and Resource Allocation Plan as required by Paragraph 14, incorporating the	(above).	
apply for each failure to conduct monitoring of WMU Vents and to incorporate that monitoring into the LDAR Program and Resource Allocation Plan as required by Paragraph 14, incorporating the requirements of Appendix A	(above).	
apply for each failure to conduct monitoring of WMU Vents and to incorporate that monitoring into the LDAR Program and Resource Allocation Plan as required by Paragraph 14, incorporating the	(above). Applicable stipulated pena	

T 1 . T 1 .	I T D I D I I I I I I	
Equipment Leaks): The applicable	LDAR Appendix A stipulated penalties table	
Appendix A LDAR stipulated	(above).	
penalties shall apply for each		
failure to repair equipment as		
required by Paragraph 14,		
incorporating the requirements of		
Appendix A Paragraphs 9–27, 30,		
and 31.		
xxi. Paragraph 15 (Fixed Roof	Period of Noncompliance	Penalty per Day late
Requirements): Each failure to	1 – 15 Days	\$1,000
comply with the requirements of	16 – 30 Days	\$2,000
Paragraph 15.	31 Days or More	\$3,000 per Day
www. Dama amanda 16 OMana a amanda 6	Period of Noncompliance	Penalty per Day late
xxii. Paragraph 16 (Management of	1 – 15 Days	\$300
<u>Change</u>): Each failure to comply	16 – 30 Days	\$400
with the requirements of Paragraph	31 Days or More	\$500 per Day
16.		, 1
xxiii. Paragraph 17 (Wastewater Training	Period of Noncompliance	Penalty per Day late
<u>Protocol – Plan Submission)</u> :	1 – 15 Days	\$300
Failure to timely develop and	16 – 30 Days	\$400
submit a written training protocol	31 Days or More	\$500 per Day
for Wastewater Personnel that		1 ,
meets the requirements of		
Paragraph 17.		
xxiv. Paragraph 17 (Wastewater Training	Period of Noncompliance	Penalty per Day late
Protocol - Implementation): Each	1 – 15 Days	\$300
failure to conduct training for all	16 – 30 Days	\$400
Wastewater Personnel in	31 Days or More	\$500 per Day
accordance with the approved		
training protocol and pursuant to		
the schedule set forth in Paragraph		
17.		

- 38. Stipulated Penalties in Lieu of those in Paragraphs 37.a. xv and xvi.
- a. For purposes of this Paragraph, the term "Non-Compliant Valve" means a valve that is either: (i) not a Low-E Valve; or (ii) not fitted with Low-E Packing when it

is required to be one or the other. The term "Compliant Valve" means a valve that is either: (i) a Low-E Valve; or (ii) fitted with Low-E Packing when it is required to be.

- b. The stipulated penalties in Paragraph 38 are to be used instead of those in Paragraphs 37.a. xv and xvi when a Non-Compliant Valve is installed instead of a Compliant Valve and all of the following requirements are met:
 - (1) Defendant, and not a government agency, discovers the failure involved;
 - (2) Defendant promptly reports the failure to EPA;
 - (3) In the report, Defendant sets forth a schedule for promptly replacing the Non-Compliant Valve with a Compliant Valve; provided, however, that Defendant shall not be required to undertake an unscheduled shutdown of the affected Covered Process Unit in proposing the schedule unless Defendant so chooses;
 - (4) Defendant monitors the Non-Compliant Valve once a month from the time of its discovery until the valve is replaced with a Compliant Valve and no Screening Values above 500 ppm are recorded;
 - (5) Defendant replaces the Non-Compliant Valve or Valve Packing with a Compliant Valve or Valve Packing in accordance with the schedule set forth in Paragraph 38.b(3); and
 - (6) Defendant demonstrates that in good faith it intended to install a

 Compliant Valve but inadvertently installed a Non-Compliant

Valve.

- c. The following stipulated penalties shall apply under the circumstances in Paragraph 38.b:
 - (1) In lieu of the penalty in Paragraph 37.a.xv, \$4,000 per failure.
 - (2) In lieu of the penalty in Paragraph 37.a.xvi, \$100 per Day per failure, not to exceed \$4,000.
- 39. Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section IX (Reporting Requirements) of this Consent Decree, Paragraph 39 of Appendix A, and Paragraph 5 of Appendix B:

Penalty Per Violation Per Day	<u>Period of Noncompliance</u>
\$750	1 st through 14 th Day
\$1,000	15 th through 30 th Day
\$1,250	31st Day and beyond

40. <u>Any Other Non-Compliance with the Consent Decree</u>. The following stipulated penalties shall accrue per violation per Day for each violation of any requirement of this Consent Decree, including its Appendices, not otherwise enumerated above:

Penalty Per Violation Per Day	<u>Period of Noncompliance</u>
\$750	1st through 14th Day
\$1,000	15th through 30th Day
\$1,250	31st Day and beyond

41. <u>Transfer of Ownership</u>. If Defendant fails to: (a) provide a copy of this Consent Decree to any proposed transferee; (b) provide written notice to the United States at least 30 Days prior to any transfer of any portion of the Facility; or (c) provide a copy of the proposed written agreement with the transferee as required by Paragraph 4, Defendant shall pay a stipulated penalty of \$100,000 per occurrence.

- 42. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.
- 43. Defendant shall pay any stipulated penalty within 30 Days of receiving the United States' written demand.
- 44. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.
- 45. Stipulated penalties shall continue to accrue as provided in Paragraph 42, during any Dispute Resolution, but need not be paid until the following:
 - a. If the dispute is resolved by agreement of the Parties or by a decision of EPA that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement to resolve the dispute or the receipt of EPA's decision or order.
 - b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.
 - c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 30 Days of receiving the final appellate court decision.
- 46. <u>Obligations Prior to the Effective Date</u>. Upon the Effective Date, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all

violations of: Paragraphs 2–8, and 13–38 of Appendix A; Paragraphs 2–4 and 6–18 of Appendix B; and Paragraphs 1–17 of Appendix C that have occurred prior to the Effective Date. Stipulated penalties that may have accrued prior to the Effective Date under this Paragraph may not be collected unless and until this Consent Decree has been entered by the Court.

- 47. Defendant shall pay stipulated penalties owing to the United States in the manner set forth in Paragraph 9 and with the confirmation notices required by Paragraph 10, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.
- 48. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.
- 49. The payment of penalties and interest, if any, shall not alter in any way

 Defendant's obligation to complete the performance of the requirements of this Consent Decree.
- 50. 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 XIV (Effect of Settlement/Reservation of Rights), the United States expressly reserves the right to seek any other relief it deems appropriate for Defendant's violation of this Decree or applicable law, including but not limited to an action against Defendant for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced

by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

XI. FORCE MAJEURE

- 51. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. The requirement that Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure, such that the delay and any adverse effects of the delay are minimized. "Force majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.
- 52. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Defendant shall provide notice by email to EPA within 72 hours of when Defendant first knew that the event might cause a delay. Within seven Days thereafter, Defendant shall provide in writing via email to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Defendant's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendant shall include with any notice all available documentation supporting the claim that the delay was

attributable to a force majeure. Failure to submit a timely or complete notice or claim under this Paragraph regarding an event precludes Defendant from asserting any claim of force majeure regarding that event, provided, however, that EPA may, in its unreviewable discretion, excuse such failure if it is able to assess to its satisfaction whether the event is a force majeure, and whether Defendant has exercised its best efforts, under Paragraph 51. Defendant shall be deemed to know of any circumstance of which Defendant, any entity controlled by Defendant, or Defendant's contractors knew or should have known.

- 53. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.
- 54. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Defendant in writing of its decision.
- 55. If Defendant elects to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution), it shall do so no later than 15 Days after receipt of EPA's notice. In any such proceeding, Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Defendant complied with the requirements of Paragraphs 51 and 52.

If Defendant carries this burden, the delay at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

XII. DISPUTE RESOLUTION

- 56. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendant's failure to seek resolution of a dispute under this Section shall preclude Defendant from raising any such issue as a defense to an action by the United States to enforce any obligation of Defendant arising under this Decree.
- 57. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends DOJ and EPA a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 20 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.
- 58. <u>Formal Dispute Resolution</u>. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by sending DOJ and EPA a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

- 59. The United States will send Defendant its Statement of Position within 45 Days of receipt of Defendant's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position is binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.
- by filing with the Court and serving on the United States a motion requesting judicial resolution of the dispute. The motion (a) must be filed within ten Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph; (b) may not raise any issue not raised in informal dispute resolution pursuant to Paragraph 57, unless the Plaintiff raises a new issue of law or fact in the Statement of Position; (c) shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and (d) shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.
- 61. The United States shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

62. Standard of Review

a. <u>Disputes Concerning Matters Accorded Record Review</u>. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 60 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the

adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

- b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 60, Defendant shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree.
- 63. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 45. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section X (Stipulated Penalties).

XIII. INFORMATION COLLECTION AND RETENTION

- 64. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:
 - a. monitor the progress of activities required under this Consent Decree;
 - b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;

- c. obtain samples or other monitoring data and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;
 - d. obtain documentary evidence, including photographs and similar data; and
 - e. assess Defendant's compliance with this Consent Decree.
- 65. Upon request, Defendant shall provide EPA or its authorized representatives splits of any samples taken by Defendant. Upon request, EPA shall provide Defendant splits of any samples taken by EPA.
- 66. Until five years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendant's performance of its obligations under this Consent Decree. This information-retention requirement shall 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, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.
- 67. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendant shall deliver any such documents, records, or other information to EPA. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege

recognized by federal law. If Defendant asserts such a privilege, it shall provide the following:

(a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Defendant. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

- 68. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.
- 69. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XIV. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

- 70. This Consent Decree resolves only the civil claims of the United States for the violations alleged in the Complaint or identified in the February 2020 Letter through the Date of Lodging of this Consent Decree.
- 71. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing

regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 70. The United States further reserves all legal and equitable remedies to address any conditions if there is or may be an imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

- 72. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to the Facility or Defendant's violations, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 70.
- 73. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Defendant's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401, et seq., or with any other provisions of federal, State, or local laws, regulations, or permits.
- 74. This Consent Decree does not limit or affect the rights of Defendant or of the United States against any third parties not a Party to this Consent Decree, nor does it limit the

rights of third parties not a Party to this Consent Decree, against Defendant, except as otherwise provided by law.

75. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not Party to this Consent Decree.

XV. COSTS

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

XVI. NOTICES

77. Unless otherwise specified in this Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and sent by mail or email, with a preference for email, addressed as follows:

As to DOJ by email (preferred): eescdcopy.enrd@usdoj.gov

Re: DJ # # 90-5-2-1-12383

As to DOJ by mail: EES Case Management Unit

Environment and Natural Resources Division

U.S. Department of Justice

P.O. Box 7611

Washington, D.C. 20044-7611 Re: DJ # # 90-5-2-1-12383

As to EPA by email: russo.todd@epa.gov

As to U.S. Attorney's Office

For the District of South Carolina: USASC.EnvironmentalJustice@usdoj.gov

As to Defendant's Legal

Counsel by email (preferred): eware@williamsmullen.com

As to Defendant's Legal

Counsel by mail: Ethan R. Ware, Esquire

Williams Mullen

1230 Main Street, Suite 330 Columbia, South Carolina 29201

RE: 3V Sigma USA, Inc.

As to Defendant by email: k.dismukes@3VSigmaUSA.com

As to Defendant by mail: Kathryn Dismukes, CFO

3V Sigma USA, Inc. 888 Woodstock Street

Georgetown, South Carolina 29440

- 78. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.
- 79. Notices submitted pursuant to this Section shall be deemed submitted upon mailing or transmission by email, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XVII. EFFECTIVE DATE

80. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket; provided, however, that Defendant hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree

before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

XVIII. RETENTION OF JURISDICTION

81. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XII (Dispute Resolution) and XIX (Modification), or effectuating or enforcing compliance with the terms of this Decree.

XIX. MODIFICATION

- 82. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.
- 83. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XII (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 62, 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).

XX. TERMINATION

84. After Defendant has completed the requirements of Sections V–IX and XIII of this Consent Decree and related Appendices, has thereafter maintained continuous satisfactory compliance with this Consent Decree for a period of three years, has complied with all other requirements of this Consent Decree, and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States a

Request for Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

- 85. Following receipt by the United States of Defendant's Request for Termination of this Consent Decree, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.
- 86. If the United States does not agree that the Decree may be terminated, Defendant may invoke Dispute Resolution under Section XII. However, Defendant shall not seek Dispute Resolution of any dispute regarding termination until 120 Days after service of its Request for Termination.

XXI. PUBLIC PARTICIPATION

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

XXII. SIGNATORIES/SERVICE

- 88. Each undersigned representative of Defendant, together with the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice and the U.S. Attorney for the District of South Carolina identified on the DOJ signature page below, certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.
- 89. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons. Defendant need not file an answer to the complaint in this action unless or until the Court expressly declines to enter this Consent Decree, in which case Defendant's answer would be due 30 Days following the Court's order.

XXIII. INTEGRATION

90. This Consent Decree, including deliverables that are subsequently approved pursuant to this Decree, constitutes the entire agreement among the Parties regarding the subject matter of the Decree and supersedes all prior representations, agreements and understandings, whether oral or written, concerning the subject matter of the Decree herein.

XXIV. 26 U.S.C. SECTION 162(F)(2)(A)(II) IDENTIFICATION

91. For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 1.162-21(b)(2),

performance of Section II (Applicability) Paragraph 5; Section V (Compliance Requirements)

Paragraph 12 and related Appendices A–C; Section VI (Compliance Evaluation and Audit

Requirements) Paragraphs 13, 17 (except subparagraph a), 19, and 20; Section VII (Approval of

Deliverables) Paragraphs 21 and 22; Section IX (Reporting Requirements) Paragraphs 28, 30,

and 31; and Section XIII (Information Collection and Retention) Paragraphs 64–66, is restitution,

remediation, or required to come into compliance with law.

XXV. HEADINGS

92. Headings to the Sections and Subsections of this Consent Decree are provided for convenience and do not affect the meaning or interpretation of the provisions of this Consent Decree.

XXVI. FINAL JUDGMENT

93. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and Defendant.

XXVII. APPENDICES

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

Appendix A (Leak Detection and Repair);

Appendix B (Storage Tanks and Closed Vent System); and

Appendix C (Wastewater).

Dated and entered this day of	, 20
	UNITED STATES DISTRICT JUDGE
	District of South Carolina

FOR THE UNITED STATES OF AMERICA:

TODD KIM

Assistant Attorney General Environment and Natural Resources Division U.S. Department of Justice

Date:	BY: s/	Shei

BY: s/ Sheila McAnaney
SHEILA MCANANEY (IL #6309635)
BRIAN SCHAAP (D.C. Bar No. 1780655)
Trial Attorneys
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044-7611
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Email: sheila.mcananey@usdoj.gov Tel. (202) 305-1167 (Schaap) Email: brian.schaap@usdoj.gov

FOR THE UNITED STATES OF AMERICA, ct'd:

ADAIR FORD BOROUGHS

United States Attorney
District of South Carolina

Date: 27APR 2023

BY: /s/ LEE E. BERLINSKY (#5443)

Assistant United States Attorney United States Attorney's Office District of South Carolina 151 Meeting Street, Suite 200 Charleston, South Carolina 29401

Telephone: (843) 266-1679 Email: lee.berlinsky@usdoj.gov FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

LEIF PALMER

Regional Counsel

Office of Regional Counsel

U.S. Environmental Protection Agency, Region IV

OF COUNSEL:

BONNIE SAWYER Attorney Advisor U.S. Environmental Protection Agency, Region IV Office of Regional Counsel 61 Forsyth Street, S.W. Atlanta, Georgia 30303 FOR 3V SIGMA, USA, INC.:

Date: 03 08 2023



APPENDIX A

LEAK DETECTION AND REPAIR REQUIREMENTS

<u>Definitions</u>. Terms used in this Appendix that are defined in the Act or in regulations promulgated pursuant to the Act or in the Consent Decree shall have the meanings assigned to them in the Act or such regulations or in the Decree, unless otherwise provided in this Appendix. Whenever the terms set forth below are used in this Appendix, the following definitions shall apply:

- a. "Average" shall mean the arithmetic mean.
- b. "Covered Equipment" shall mean pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, closed vent systems, and control devices used to meet the requirements of Subpart UU in organic hazardous air pollutant service in the Covered Process Units.
 - c. "DOR" shall mean Delay of Repair.
 - d. "Extension," shall mean that:
 - i. the tested and untested valves were produced by the same manufacturer to the same or essentially equivalent quality requirements;
 - ii. the characteristics of the valve that affect sealing performance (*e.g.*, type of valve, stem motion, tolerances, surface finishes, loading arrangement, and stem and body seal material, design, and construction) are the same or essentially equivalent as between the tested valve and the untested valve; and
 - iii. the temperature and pressure ratings of the tested valve are at least as high as the temperature and pressure ratings of the untested valve.
- e. "LDAR Audit Commencement Date" or "Commencement of an LDAR Audit" shall mean the first Day of the on-site inspection that accompanies an LDAR audit.
- f. "LDAR Inspection Campaign" shall mean a Day for each LDAR Personnel where the work assigned requires 75% or more of the shift spent performing LDAR inspections to comply with routine Monthly or Quarterly component inspection requirements.
- g. "LDAR Personnel" shall mean all 3V employees and contractors who perform any of the following activities at the Facility: LDAR

monitoring; LDAR data input; maintenance of LDAR monitoring devices; leak repairs on equipment subject to LDAR; and/or any other field duties generated by LDAR Regulations or the LDAR Program.

- h. "LDAR Program" shall mean the Leak Detection and Repair Program specified in Paragraphs 1 39 of Appendix A to this Decree, together with the Storage Tank and Closed Vent System LDAR Plan developed in accordance with Appendix B, and Paragraph 14 of Appendix C.
- i. "Low-Emissions Packing" or "Low-E Packing" shall mean either of the following:
 - i. A valve packing product, independent of any specific valve, for which the manufacturer has issued a written warranty that the packing will not emit fugitives at a concentration greater than 100 ppm, and that, if it does so emit at any time in the first five years, the manufacturer will replace the product; provided, however, that no packing product shall qualify as "Low-E" by reason of written warranty unless the packing first was tested by the manufacturer or a qualified testing firm pursuant to generally-accepted good engineering practices for testing fugitive emissions and the results of the testing reasonably support the warranty; or
 - ii. A valve-packing product, independent of any specific valve, that has been tested by the manufacturer or a qualified testing firm pursuant to generally accepted good engineering practices for testing fugitive emissions, and that, during the test, at no time leaked at greater than 500 ppm, and on Average, leaked at less than 100 ppm.
- j. "Low-Emissions Valve" or "Low-E Valve" shall mean either of the following:
 - i. A valve (including its specific packing assembly or stem sealing component) for which the manufacturer has issued a written warranty that it will not emit fugitives at a concentration greater than 100 ppm, and that, if it does so emit at any time in the first five years, the manufacturer will replace the valve; provided, however, that no valve shall qualify as "Low-E" by reason of written warranty unless the valve (including its specific packing assembly) either:

- a) first was tested by the manufacturer or a qualified testing firm pursuant to generally-accepted good engineering practices for testing fugitive emissions and the results of the testing reasonably support the warranty; or
- b) is an Extension of another valve that qualified as "Low-E" under Subparagraph i above;
- ii. A valve (including its specific packing assembly) that:
 - a) has been tested by the manufacturer or a qualified testing firm pursuant to generally-accepted good engineering practices for testing fugitive emissions and that, during the test, at no time leaked at greater than 500 ppm, and on Average, leaked at less than 100 ppm; or
 - b) is an Extension of another valve that qualified as "Low-E" under Subparagraph i above.
- k. "Open-Ended Line" or "OEL" shall mean any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.
- 1. "Repair Verification Monitoring" shall mean the utilization of monitoring (or other method that indicates the relative size of the leak) within 24 hours after each attempt at repair of a leaking piece of equipment in order to ensure that the leak has been eliminated or is below the applicable leak definition in this LDAR Program.
- m. "Subpart UU" shall mean 40 C.F.R. Part 63, Subpart UU (National Emission Standards for Equipment Leaks Control Level 2 Standards).
- 1. Unless otherwise specified, all obligations of this Appendix A shall commence on March 31, 2023. This Appendix A, together with the Storage Tank and Closed Vent System LDAR Plan developed in accordance with Appendix B and Paragraph 14 of Appendix C, constitute the Leak Detection and Repair Program that 3V shall apply to all Covered Equipment at the Facility. Consistent with Section XX of the Consent Decree (Termination), unless otherwise specified, the obligations of the Leak Detection and Repair Program shall run for a period of no fewer than three years of continuous compliance from the Effective Date of this Consent Decree.

A. Leak Detection Program

2. Facility-Wide LDAR Program. By no later than March 31, 2023, 3V shall

develop a facility-wide plan that describes: (i) its LDAR Program for the Covered Process Units (e.g., applicability of regulations to process units and/or specific equipment; leak definitions; monitoring frequencies); (ii) a tracking program (e.g., Management of Change in Paragraph 28) that ensures that new equipment added to Covered Process Units for any reason are integrated into the LDAR Program and equipment that is taken out of service is removed from the LDAR Program within 30 Days; (iii) the roles and responsibilities of all employee and contractor personnel assigned to LDAR functions at the Facility; (iv) a statement of how the resources (e.g., leak detectors, program oversight, LDAR Personnel, etc.) allocated to the LDAR Program are sufficient to satisfy the requirements of this Consent Decree; (v) a description of how 3V plans to implement the LDAR Program under this Consent Decree; and (vi) a process to document and track the actual number of LDAR inspections for each calendar quarter in comparison to the anticipated number of inspections per calendar quarter. The LDAR Program must include the requirements set forth in the Storage Tank and Closed Vent System LDAR Plan developed in accordance with Appendix B to this Consent Decree and in Paragraph 14 of Appendix C to this Consent Decree. 3V shall review this document and update it as needed by no later than 60 days after submission of each LDAR Audit report.

- 3. <u>LDAR Resource Allocation Plan</u>. In its LDAR Program, 3V must include, and update, a Resource Allocation Plan that includes the following data: (i) the total number of LDAR inspections planned in a year by type; (ii) the number of Days per calendar year allocated to performing LDAR inspections; (iii) the assumed production rates for each LDAR Personnel per Day for LDAR inspections by type (*e.g.*, OGI or Method 21); (iv) the assumed average time in seconds by Process Unit to complete one LDAR Inspection Task Cycle during a routine LDAR Inspection Campaign; and (v) the assumed average productivity hours per Day for each LDAR Personnel during a routine LDAR Inspection Campaign.
- 4. <u>Monitoring Frequency and Equipment</u>. 3V shall monitor all Covered Equipment at the following frequencies, unless: (i) more frequent monitoring is required by federal, state, or local laws or regulations; or (ii) the relevant Covered Process Unit has been permanently shut down; or (iii) 3V has met the requirements for, and elected to comply with, alternative monitoring frequencies pursuant to Paragraph 6:
 - a. Valves Quarterly;
 - b. <u>Pressure relief devices</u> Quarterly;
 - c. Connectors Annually;
 - d. Pumps/Agitators Monthly; and
 - e. <u>OELs</u> Quarterly. Monitoring will be done at the end of all OELs in the Covered Process Unit. For compliance with LDAR regulations, OEL monitoring results shall not be included in calculating the leak rate for the Covered Process Unit.

Compliance with the monitoring frequencies in this Paragraph is not required when a specific, applicable LDAR provision excludes or exempts, fully or partially, monitoring at a periodic

frequency (e.g., an exemption for equipment that is designated as unsafe-to-monitor or difficult-to-monitor or an exemption for pumps that have no externally actuated shaft), provided that 3V satisfies all applicable conditions and requirements for the exclusion or exemption set forth in the regulation.

- elect to monitor valves and connectors that have been Replaced or Repacked. 3V may elect to monitor valves and connectors that have been replaced, repacked, or improved pursuant to Paragraphs 18 24, or 26 and 27 at the most stringent monitoring frequency required by any LDAR regulation that applies to that piece of equipment, rather than the frequency specified in Paragraph 4. If 3V has made such an election for a valve or connector and a leak above the thresholds defined in Paragraph 9 of this Appendix is subsequently detected from that piece of equipment, 3V shall monitor that piece of equipment Monthly until the equipment shows no leaks at the leak definition levels in Paragraph 9 for 12 consecutive months. If 3V has met the requirements in Paragraph 10 of this Appendix, it may apply the leak thresholds defined in Paragraph 10 of this Appendix for the purposes of this Paragraph. At that time, 3V may commence monitoring at the most stringent frequency required by any LDAR regulation that applies to that type of equipment.
- 6. Alternative Monitoring Frequencies for Valves, Connectors, and OELs. 3V may elect to comply with the alternative monitoring requirements set forth in Table 1 below at any time that the Equipment in a Covered Process Unit meets the criteria set forth in Table 1 and the most recent LDAR Audit calculated a Comparative Monitoring Leak Percentage below 0.5% and a Comparative Monitoring Leak Ratio below 3.0. 3V must notify EPA of each Covered Process Unit where 3V makes this election no later than three Months prior to implementing this alternative monitoring frequency. 3V may elect to comply with the monitoring requirements of this Paragraph at one or more Covered Process Units, but may not make this election for anything less than all pieces of Covered Equipment of the same type (i.e., valves, connectors, or OELs) in one entire Covered Process Unit. 3V may not elect to comply with the frequencies in Table 1 without also complying with Subparagraphs 6.a and 6.b of this Appendix.

Table 1: Alternative Monitoring Frequencies

Equipment Type	Criteria for Election	Alternative Monitoring Frequency
Valves	No leaks for eighteen consecutive Months of monitoring	Annually
Connectors	No leaks for two consecutive years of monitoring	Once every two years
OELs	No leaks for eighteen consecutive Months of monitoring	Annually

a. If any leaks at thresholds above those defined in Paragraph 9 are detected during the alternative monitoring schedule or during an LDAR Audit or a federal, state, or local audit or inspection, 3V immediately shall start

monitoring the leaking components in accordance with Subparagraph 6.b. If 3V has met the requirements in Paragraph 10 of this Appendix, it may apply the leak definitions in Paragraph 10 of this Appendix for the purposes of this Sub-Paragraph.

- b. For valves, connectors and open-ended lines that have leaked at any time in the required number of consecutive Months of monitoring listed in Table 1, 3V shall monitor each piece of equipment Monthly until the piece of equipment shows no leaks above the thresholds in Paragraph 9 for six consecutive Months, at which time 3V may commence monitoring at the frequency set forth in Table 1 above. If 3V has met the requirements in Paragraph 10 of this Appendix, it may apply the leak definitions in Paragraph 10 of this Appendix for the purposes of this Sub-Paragraph.
- 7. <u>Calibration of Monitoring Instrument</u>. Before use on each day of a monitoring event required under this CD, or Subpart FFFF, 3V shall calibrate the monitoring instrument used for Method 21 monitoring conducted pursuant to this Consent Decree in accordance with Method 21 and Subpart UU. For all Method 21 monitoring, 3V shall calibrate the monitoring instrument using the following gases:
 - a. A zero gas cylinder measuring less than 10 ppm VOC; and
 - b. For any monitoring instrument designed for multiple calibration scales, at least two calibration scales with the lower scale using a calibration gas that is approximately equal to 500 ppm, and the highest scale using a calibration gas that is approximately equal to 10,000 ppm.

8. Recording Monitoring Data.

- a. For each monitoring event required under this Consent Decree, 3V shall use a monitoring instrument attached to a data logger, or equivalent instrument, which directly records electronically the Screening Value detected at each piece of Covered Equipment, the date and time that each Screening Value is taken, and the identification numbers of the monitoring instrument and technician. 3V shall transfer this monitoring data to an electronic database within one week following monitoring for recordkeeping purposes.
- b. If, during monitoring in the field, a piece of Covered Equipment is discovered that is not listed in the data logger, 3V is permitted to monitor the piece of Covered Equipment and record, by any means available, the Screening Value, the date and time of the Screening Value, and the identification numbers of the monitoring instrument and technician. In such an instance, the failure to initially record the information electronically, in the data logger, does not constitute a violation of the requirement in Subparagraph (a) to record the required information electronically, provided that 3V, as soon as possible, but no later than 20 Days after discovery of the unlisted equipment,

adds the piece of Covered Equipment, and the information regarding the monitoring event to the LDAR database.

B. Leak Repair Program

9. <u>Leak Detection and Repair Action Levels</u>. For a period of no fewer than two years from the Effective Date of this Consent Decree, 3V shall perform repairs in accordance with Paragraphs 13 – 17 of this Appendix for all leaks detected at or above the leak definitions listed in Table 2 for the specific equipment type, excluding equipment in heavy liquid service.

Equipment Type	Leak Definition (ppm)
Valves	250
Connectors	500
Pumps	500
Agitators	1,000
OELs (at the Closure Device)	250
Pressure Relief Devices	500

Table 2. Leak Definitions by Equipment Type

10. Provided that 3V has complied with Paragraph 9 continuously for two years following the Effective Date, until termination of the Consent Decree, 3V shall perform repairs in accordance with Paragraphs 13 – 17 of this Appendix for all leaks detected at or above the leak definitions listed in Table 3 for the specific equipment type, excluding equipment in heavy liquid service. Prior to repairing at the leak thresholds in Table 3, 3V must submit a certified statement by an officer or director of 3V that 3V complied with Paragraph 9 for two continuous years.

Table 3. Leak Definitions by Equipment Type

Equipment Type	Leak Definition (ppm)
Valves	500
Connectors	AVO
Pumps	1,000
Agitators	10,000
OELs (at the Closure	AVO
Device)	
Pressure Relief	500
Devices	

- 11. 3V may elect whether to adjust the monitoring instrument readings for background pursuant to any provisions of applicable LDAR requirements that address background adjustment, provided that 3V complies with the requirements for doing so or not doing so.
- 12. If at any time, including outside of periodic monitoring, evidence of a potential leak is detected through, audio, visual or olfactory sensing, 3V shall comply with all applicable regulations and, if repair is required, shall perform that repair in accordance with Paragraph 13 of this Appendix.
- 13. <u>Repairs.</u> Except as provided in Subparagraph I.B.22.c (Actions requiring pending replacing or repacking), after recording a Screening Value of a piece of Covered Equipment at or above the applicable leak definition in this LDAR Program, 3V shall perform a first attempt at repair within 5 Days of detecting the leak. If 3V elects to perform a repair, by no later than 15 Days after detection, 3V shall perform a final attempt at repair or may place the piece of equipment on the DOR list, provided that 3V has complied with all applicable regulations and with the requirements in Paragraphs 18 24 (valve replacement and improvement), 26 and 27 (connector replacement) of this Appendix.
- 14. <u>Repair Verification Monitoring</u>. Except as provided in Subparagraph 22.c (Actions requiring pending replacing or repacking), 3V shall perform Repair Verification Monitoring.
- 15. For each detected leak, 3V shall record the following information: the date of all repair attempts; the repair methods used during each repair attempt; the date, time, and Screening Values for all re-monitoring events; and, if applicable, documentation of compliance with Paragraphs 16 and 17 for Covered Equipment placed on the DOR list. A leak shall be considered repaired when the leak is eliminated or is below the applicable leak definition in this LDAR Program
- 16. 3V may take a leaking piece of Covered Equipment temporarily or permanently out of service; provided, however, that prior to placing the leaking piece of Covered Equipment back in service, 3V must repair the leak or must comply with the requirements of Paragraph 17, below, to place the piece of equipment on the DOR list.
- 17. <u>Delay of Repair</u>. For all Covered Equipment placed on the DOR list, 3V shall:
 - a. Require sign-off from the Covered Process Unit supervisor or person of similar authority on documentation that shows that:
 - i. the piece of equipment is technically infeasible to repair without a process unit shutdown; or
 - ii. emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from DOR:

- b. Maintain a written record of the facts that explain any DOR and why the repair was technically infeasible based on Subparagraphs 17.a.(i) or (ii) without a process shutdown;
- c. Undertake periodic monitoring of the Covered Equipment placed on the DOR list at the frequency specified in Paragraph 4, for that type of Covered Equipment;
- d. Except as provided in Subparagraph 17.e, repair the piece of Covered Equipment by the end of the next Covered Process Unit shutdown following the monitoring event that triggered the repair. 3V may carry over repairs from a subsequent process unit shutdown if 3V documents that insufficient time existed between the monitoring event and the non-operative time to enable 3V to purchase and install the required valve or valve packing technology. In that case, 3V shall undertake the replacing or repacking during the next Covered Process Unit shutdown that occurs after 3V's receipt of the valve or valve packing, including all necessary associated materials;
- e. If applicable under Paragraphs 18-27 below, replace, repack, or improve the piece of equipment by the timeframes set forth in Paragraphs 18-27.

Valve Replacement and Improvement Program

- 18. <u>Valve Replacement, Repacking, and Improvement Program</u>. 3V shall implement the program set forth in Paragraphs 19 27 to improve the emissions performance of the valves that are Covered Equipment in each Covered Process Unit.
- 19. Existing Valve List. In the first Compliance Status Report required under Section IX of this Consent Decree, 3V shall include a list of the tag numbers of all valves subject to this LDAR Program, broken down by Covered Process Unit LDAR Program, that are in existence as of the Effective Date. The valves on this list shall be the "Existing Valves" for the purposes of this Paragraph.
- Valve that Is Installed and each Existing Valve that Is Repacked. 3V shall undertake the work practices specified in this Paragraph with respect to each new valve that is subject to LDAR that is installed (whether the new valve replaces an Existing Valve or is newly added to a Covered Process Unit) and each Existing Valve that is repacked. Upon installation (or re-installation in the case of repacking), 3V shall tighten the valve's packing gland nuts or their equivalent (e.g., pushers) to: (i) the manufacturer's recommended gland nut or packing torque; or (ii) any appropriate tightness that will minimize the potential for fugitive emission leaks of any magnitude. This practice shall be implemented prior to the valve's exposure (or re-exposure, in the case of repacking) to process fluids.
- 21. <u>Installing New Valves</u>. Except as provided in Subparagraph a, 3V shall ensure that each new valve that it installs in each Covered Process Unit that, when installed, will

be regulated under applicable LDAR regulations, is either a Low-E Valve or is fitted with Low-E Packing. This requirement applies to entirely new valves that are added to a Covered Process Unit and to Existing Valves that are replaced for any reason in a Covered Process Unit.

- a. Paragraph 21 shall not apply in emergencies or exigent circumstances requiring immediate installation or replacement of a valve where a Low-E Valve or Low-E Packing is not available on a timely basis. Any such instance shall be reported in the next LDAR Program compliance status report.
- 22. <u>Replacing or Repacking Existing Valves with Low-E Valves or Low-E</u> Packing.
 - a. <u>Existing Valves Required to Be Replaced or Repacked</u>. For each Existing Valve that has a Screening Value at or above 250 ppm twice in any four-year period or above 500 ppm once in any two-year period, 3V shall either replace or repack the Existing Valve with a Low-E Valve or Low-E Packing.
 - b. <u>Timing</u>: 3V shall replace or repack the existing valve no later than 15 Days after the monitoring event that triggers the packing or replacing requirement under Subparagraph 22.a, unless 3V complies with the following prior to the 15 Day deadline:
 - i. Prior to the 15-Day deadline, 3V takes all actions necessary to obtain the required valve or valve packing, including all necessary associated materials, as expeditiously as practicable, and retains documentation of the actions taken and the date of each such action;
 - ii. If, despite 3V's efforts to comply with Subparagraph 22.b(i), the required valve or valve packing, including all necessary associated materials, is not available in time to complete the installation within 30 Days, 3V must take all reasonable actions to minimize emissions from the valve pending completion of the required replacing or repacking. Examples include: repair; more frequent monitoring, with additional repairs as needed; where practical, interim replacing or repacking of a valve with a valve that is not a Low-E Valve or with packing that is not Low-E Packing; and
 - iii. 3V must promptly perform the required replacing or repacking after its receipt of the valve or valve packing, including all necessarily associated materials.
 - c. <u>Actions Required Pending Replacing or Repacking Pursuant to Paragraph 22.a.-b.</u>
 - i. If 3V does not complete the replacing or repacking within 15 Days, or if at the time of the leak detection 3V reasonably can anticipate that it might not be able to complete the replacing and repacking within 15

Days, 3V shall comply with all applicable requirements of Paragraphs 13 – 17, above, pending replacing or repacking.

- ii. For each existing valve that has a Screening Value at or above 250 ppm and below 500 ppm but does not meet the criteria in Paragraph 22.a, 3V shall comply with the repair and "delay of repair" requirements in Paragraphs 13 17 in lieu of replacing or repacking.
- 23. <u>Repairing, Replacing, or Repacking Low-E valves</u>. If a Low-E Valve or valve using Low-E Packing has a Screening Value at or above 250 ppm, 3V shall comply with Paragraph 22, above, and is not required to replace or repack it. If a Low-E Valve or valve using Low-E Packing has a Screening Value at or above 500 ppm, 3V shall replace or repack it.
- 24. <u>Records of Low-E Valves and Low-E Packing</u>. Prior to installing any Low-E Valve or Low-E Packing, or if not possible before installation, then as soon as possible after installation, 3V shall secure from each manufacturer documentation that demonstrates that the proposed valve or packing technology meets the definition of "Low-E Valve" and/or "Low-E Packing." 3V shall make the documentation available upon request by EPA.
- 25. In each Compliance Status Report due under Section IX of this Consent Decree, 3V shall include a separate section in the Report that: (i) describes the actions it took to comply with Paragraphs 18 25 (Valve Replacement and Improvement Program), including identifying each piece of equipment that triggered a requirement under Paragraphs 18 24, the Screening Value for that piece of equipment, the type of action taken (i.e. replacement, repacking, or improvement, and the date the action was taken); (ii) identifies any required actions that were not taken and explains why; and (iii) identifies the schedule for any known future replacements, repackings, improvements, or eliminations.

26. Connector Replacement and Improvement.

a. For purposes of Paragraph 27, for each of the following types of existing connectors (i.e., a connector in use at a Covered Process Unit on March 31, 2023), the following type of replacement or improvement shall apply:

Connector Type	Replacement or Improvement Description
Flanged	Replacement or improvement of the gasket
Threaded	Replacement of the connector with a like-kind connector or other
Compression	Replacement of the connector with a like-kind connector or other
CamLock	Replacement or improvement of the gasket or replacement or improvement of the CamLock
Quick Connect	Replacement or improvement of the gasket, if applicable, or replacement of the connector (with either a like-kind connector or other), if there is no gasket
Any type	Elimination (e.g., through welding, pipe, etc.)

For purposes of this Paragraph, "gasket" means a sealing element that includes, but is not limited to, an O-ring, gasket, or D-ring.

- b. In cases where a like-kind replacement is utilized as the method for replacing or improving an existing connector (*e.g.*, a Quick Connect replaces another Quick Connect), the provisions of Subparagraphs 26.b.(i) and (ii) shall apply.
 - i. If there are types, models or styles of a like-kind connector that are less likely to leak than the existing connector, and one or more of those types, models or styles are technically feasible to use (considering the service, operating conditions, and type of piping or tubing that the connector is in), and would not create a safety, major mechanical, major product quality, regulatory or other issue, 3V shall select a like-kind connector from among such types, models or styles.
 - ii. If Subparagraph 26.b.(i) does not apply, 3V may install a like-kind connector that is the same type, model or style as the existing connector.

27. Replacing or Improving Connectors.

- a. <u>Trigger for Replacement or Improvement Requirements.</u>

 For each connector that, in any two of three consecutive monitoring periods, has a Screening Value at or above 500 ppm, 3V shall replace or improve the connector in accordance with the applicable replacement or improvement described in Paragraph 26. 3V shall use best efforts to install a replacement or improvement that will be the least likely to leak, using good engineering judgment, for the service, operating conditions, and type of piping or tubing to which the connector is connected.
- b. <u>Timing</u>. If the replacement or improvement does not require a Covered Process Unit shutdown, 3V shall undertake the replacement or improvement within 15 Days after the monitoring event that triggers the replacement or improvement requires a Covered Process Unit shutdown, 3V shall undertake the replacement or improvement during the first Covered Process Unit shutdown that follows the monitoring event that triggers the requirement to replace or improve the connector, unless 3V documents that insufficient time existed between the monitoring event and the Covered Process Unit shutdown to enable 3V to secure and install the replacement or improvement. In that case, 3V shall undertake the replacement or improvement at the next Covered Process Unit shutdown that follows thereafter.
- c. <u>Repair Requirements Pending Replacements or</u> <u>Improvements Pursuant to Subparagraph 27.a. and b.</u> For each connector that has

- a Screening Value at or above 500 ppm, 3V shall not be required to comply with Subparagraphs 27.a. and b. pending replacement or improvement pursuant to Subparagraph 27.a. if 3V completes the replacement or improvement within 15 Days of detecting the leak.
- d. In each Compliance Status Report due under Section IX of this Decree, 3V shall include a separate section that: (i) describes the actions it took to comply with Paragraphs 26 and 27 (Connector Replacement and Improvement Program), including identifying each piece of equipment that triggered a requirement under Subparagraph 26.a, the Screening Value for that piece of equipment, and the type of action taken; (ii) identifies any required actions that were not taken and explains why; and (iii) identifies the schedule for any planned future action to comply with Paragraph 27.
- 28. Management of Change. Within 30 Days after submission of the first Compliance Status Report, 3V shall implement a "Management of Change Protocol" that shall ensure that each piece of equipment that is added to a Covered Process Unit for any reason is evaluated to determine if it is subject to LDAR requirements. For each piece of Covered Equipment that is subject to the LDAR requirements that is physically added or removed from a Covered Process Unit, 3V shall ensure the component is added or removed from its LDAR Program, as soon as possible, but no later than 20 Days after the component is physically added or removed. Piping & Instrumentation Diagrams shall also be updated within the same 20 Day timeframe. This evaluation shall be a part of 3V's facility-wide Management of Change Protocol.
- 29. Training. No later than March 31, 2023, 3V shall develop a training protocol and shall ensure that all LDAR Personnel have completed training on all aspects of LDAR, including this LDAR Program, Method 21 monitoring, 3V's Management of Change Protocol, and, for all LDAR Personnel involved in OGI monitoring, OGI camera fundamentals and operation. Once per calendar year starting in the calendar year after completion of initial training, 3V shall require refresher training with respect to all LDAR Personnel. Beginning no later than March 31, 2023, 3V shall require new LDAR Personnel to be trained in Method 21, the LDAR Program, 3V's Management of Change Protocol, and, for new LDAR Personnel involved in OGI monitoring, OGI camera fundamentals and operation, no more than 90 Days prior to any field involvement (other than supervised involvement for purposes of training) with LDAR and/or in the LDAR Program. 3V shall review this training protocol and update it as needed by no later than 60 Days after completion of the Facility-wide LDAR Program and after submission of each LDAR Audit report.
- 30. <u>Daily Certification by Monitoring Technicians</u>. On each Day that monitoring pursuant to this Consent Decree occurs, at the end of such monitoring, 3V shall require each monitoring technician to certify that the data collected represents the monitoring performed for that Day by requiring the monitoring technician to sign a form that includes the following certification:

On [date], I reviewed the monitoring data that I collected today and to the best of my

knowledge and belief, the data accurately represents the monitoring I performed today.

- 31. Quality Assurance/Quality Control. Commencing by no later than the first full calendar quarter commencing March 31, 2023, during each calendar quarter, at times that are not announced to LDAR Personnel, an LDAR-trained employee of 3V or an LDAR-trained contractor, who does not serve as an LDAR monitoring technician at the Facility on a routine basis, shall undertake the following:
 - a. Verify that equipment was monitored at the appropriate frequency;
 - b. Verify that proper documentation and sign-offs have been recorded for all equipment placed on the Maintenance Shutdown or DOR list;
 - c. Ensure that repairs have been performed within the required timeframe;
 - d. Review monitoring data and equipment counts (e.g., number of pieces of equipment monitored per Day) for feasibility, unusual trends, and apparent inconsistencies;
 - e. Observe calibration of monitoring equipment to ensure that it is properly calibrated in accordance with Subpart UU and Paragraph 7, and that proper calibration records and monitoring instrument maintenance information are maintained;
 - f. Verify that other LDAR Program records are maintained as required; and
 - g. Observe in the field each LDAR monitoring technician who is conducting leak detection monitoring to see that monitoring is being conducted as required.

3V shall correct any deficiencies detected or observed as soon as practicable. 3V shall maintain a log that: (i) records the date and time that the reviews, verifications, and observations were undertaken; and (ii) describes the nature and timing of any corrective actions taken.

32. <u>LDAR Audits Schedule</u>. 3V shall retain an Independent Third Party, in accordance with Subparagraph a, to undertake LDAR audits every eighteen Months at the Covered Process Units, including for LDAR monitoring required under Appendix B and C to this Consent Decree, in accordance with the following schedule: for the first LDAR audit, the LDAR Audit Commencement Date shall be as set forth in Subparagraph (a); for each subsequent LDAR audit, the LDAR Audit Commencement Date shall occur no earlier than seventeen Months after the prior LDAR Audit Commencement Date, and no later than eighteen Months after the prior LDAR Audit Commencement Date. 3V must conduct at least three LDAR audits in accordance with the audit timeline specified in this Paragraph.

- a. For the LDAR Audits to be conducted under this Consent Decree, 3V shall retain an Independent Third Party in accordance with the selection provisions set forth in Section VI of the Consent Decree. No later than March 31, 2023, 3V must submit to EPA, in accordance with Paragraph 17 of the Consent Decree, a list of proposed consultants to serve as the Independent Third Party for purposes of this Paragraph. The LDAR Audit Commencement Date shall be no later than 120 Days after EPA's approval under Paragraph 17(a) of the Consent Decree.
- b. For each Covered Process Unit, each LDAR Audit shall include: (i) reviewing compliance with all applicable LDAR regulations; (ii) reviewing and/or verifying the same items that are required to be reviewed and/or verified in Paragraphs 28 31, above; (iii) reviewing whether any pieces of equipment that are required to be in the LDAR Program are not included; and (iv) "comparative monitoring" as described in Paragraph 33 below. LDAR Audits after the first audit also shall include reviewing the Covered Process Unit's compliance with this LDAR Program.
- 33. <u>Comparative Monitoring</u>. Comparative monitoring during LDAR Audits shall be undertaken as follows:
 - a. <u>Calculating a Comparative Monitoring Audit Leak</u>

 <u>Percentage</u>. Covered Equipment shall be monitored in order to calculate a leak percentage for the Covered Process Units. For descriptive purposes under this Paragraph, the monitoring that takes place during an LDAR Audit shall be called "comparative monitoring" and the leak percentages derived from the comparative monitoring shall be called the "Comparative Monitoring Audit Leak Percentages." 3V shall undertake comparative monitoring of the Covered Equipment in the Covered Process Units during each LDAR Audit. In undertaking Comparative Monitoring, 3V shall not be required to monitor every component in each Covered Process Unit.
 - b. <u>Calculating the Historic, Average Leak Percentage from Prior Periodic Monitoring Events.</u> The Historic, Average Leak percentage from prior periodic monitoring events, broken down by Covered Type of Equipment, shall be calculated. Four complete monitoring periods immediately preceding the comparative monitoring shall be used for this purpose. The preceding monitoring periods may comprise a mix of the monitoring periods and frequencies specified in Paragraph 4.
 - c. <u>Calculating the Comparative Monitoring Leak Ratio.</u> 3V shall calculate the ratio of the Comparative Monitoring Audit Leak percentage to the Historic Average Leak percentage. This ratio shall be called the "Comparative Monitoring Leak Ratio." If the denominator in this calculation is "zero," it shall be assumed that one leaking piece of Covered Equipment was found in the

Covered Process Unit through routine monitoring during the 365-Day period before the comparative monitoring.

- Monitoring Audit Leak Percentage calculated pursuant to Paragraph 33.a triggers a more frequent monitoring schedule under any applicable federal regulation or federally enforceable state or local law or regulation than the frequencies listed in Paragraph 4, as applicable for the Covered Type of Equipment in that Covered Process Unit, 3V shall monitor the Covered Type of Equipment at the greater frequency unless and until less frequent monitoring is again allowed under the specific federal regulation or federally enforceable state or local law or regulation. Except as provided in Paragraphs 5 and 6, at no time may 3V monitor at intervals less frequently than those in Paragraph 4.
- 35. <u>LDAR Audit Reports</u>. Within 120 Days of the LDAR auditor's first Day of on-site inspection for an LDAR audit required under Paragraph 32, the LDAR auditor shall prepare and simultaneously submit to 3V and EPA a written report ("LDAR Audit Report") that describes:
 - a. A summary of findings with respect to the topics specified in Paragraph 32.b;
 - b. The raw data with respect to the comparative monitoring described in Paragraph 33;
 - c. The Comparative Monitoring Audit Leak Percentage for each Covered Process Unit calculated pursuant to Paragraph 33.b;
 - d. The Comparative Monitoring Leak Ratio for each Covered Process Unit calculated pursuant to Paragraph 33.c.

36. Corrective Action Plan ("CAP").

a. Requirements of Preliminary CAP. 3V shall develop a preliminary CAP if: (i) an LDAR Audit identifies any suspected Areas of Noncompliance with the LDAR Program or applicable LDAR regulations (AONs); or (ii) the Comparative Monitoring Leak Ratio calculated pursuant to Subparagraph 33.c is 3.0 or higher and the comparative monitoring audit leak percentage is greater than or equal to 0.5 percent. The preliminary CAP shall describe the actions that 3V has taken or shall take to address: (i) the AONs; and/or (ii) the causes of a Comparative Monitoring Leak Ratio that is 3.0 or higher. 3V shall include a schedule by which actions that have not yet been completed shall be completed. For any corrective actions that are not expected to be completed within 90 Days of the submission of the LDAR Audit report, the preliminary CAP shall explain why, and shall propose a schedule for prompt completion of the action(s) in the final CAP to be submitted under Subparagraph 36.c. 3V promptly shall complete each corrective action item

with the goal of completing each action within 90 Days after submission of the LDAR Audit report.

- b. <u>Submission of Preliminary CAP to EPA</u>. By no later than 45 Days following submission of the LDAR Audit report, 3V shall prepare and submit to EPA the preliminary CAP. For any corrective actions that have not been completed by the time of due date of the preliminary CAP, the preliminary CAP shall include a schedule by which those actions shall promptly be completed. EPA may submit comments on the preliminary CAP.
- c. <u>Submission of the Final CAP to EPA</u>. By no later than 60 Days after EPA provides comments on the preliminary CAP or notifies 3V that it will not provide comments, 3V shall submit the final CAP to EPA, together with a certification of the completion of each item of corrective action. The Final CAP must respond to all EPA comments on the preliminary CAP. If any action is not completed within 90 Days of submission of the LDAR Audit report, 3V shall explain the reasons, together with a proposed schedule for prompt completion. 3V shall submit a supplemental certification of completion by no later than 30 Days after completing all actions.
- 27. Certification of Completion. Within 120 Days after submission of each LDAR Audit report, 3V shall certify to EPA that, to the signer's best knowledge and belief formed after reasonable inquiry: (i) except as otherwise identified, the Facility is in compliance with all applicable LDAR regulations and this LDAR Program; (ii) 3V has completed all corrective actions, if applicable, or is in the process of completing all corrective actions pursuant to a CAP; (iii) all equipment at the Facility that is regulated under LDAR has been identified and included in the Facility's LDAR program; (iv) all equipment at the Facility required by this Consent Decree to be included in the Facility's LDAR Program has been identified and included. To the extent that 3V cannot make the certification in all respects, it shall specifically identify any deviations from items (i) (iv) above.
- 38. Recordkeeping. 3V shall keep all records required by this LDAR Program, including each LDAR Audit report, to document compliance with the requirements of this LDAR Program for at least two years after termination of this Decree. Upon request by EPA, 3V shall make all such documents available to EPA and shall provide, in electronic format if so requested, all LDAR monitoring data generated during the life of this Consent Decree.
- 39. <u>LDAR Program Compliance Status Reports</u>. On the dates and for the time periods set forth in Section IX (Reporting Requirements) 3V shall submit to EPA, in the manner set forth in Section XVI (Notices), a Compliance Status Report containing the following information:
 - a. The number of days LDAR inspections took place in the reporting period;

- b. The number of LDAR Personnel at the Covered Facility (excluding Personnel whose functions involve the non-monitoring aspects of repairing leaks) and the approximate percentage of time each such person dedicated to performing his/her LDAR functions, including average LDAR Inspection Task Cycle time per Process Unit;
- c. An identification of any problems encountered in complying with the requirements of the Leak Detection and Repair Program as defined in this Appendix;
- d. Any elections to change monitoring frequency for equipment pursuant to Paragraphs 5 or 6, including supporting justification;
 - e. The list of Existing Valves as required by Paragraph 19;
 - f. The information required by Paragraph 25;
 - g. The information required by Paragraph 27;
- h. A copy of the Management of Change Protocol required under Paragraph 28;
- i. Where any deviations from the Management of Change Protocol required under Paragraph 28 have been identified, the results of a root cause analysis and any corrective actions taken;
- j. A description of the trainings done in accordance with this Consent Decree;
- k. Any deviations identified in the QA/QC performed under Paragraph 31, as well as any corrective actions taken under that Paragraph; and
- 1. The status of all actions under any CAP that was submitted during the reporting period, unless the CAP was submitted less than 30 Days before the compliance status report.

APPENDIX B

STORAGE TANKS AND CLOSED VENT SYSTEMS

<u>Definitions</u>. Terms used in this Appendix that are defined in the Act or in regulations promulgated pursuant to the Act or in the Consent Decree shall have the meanings assigned to them in the Act or such regulations or in the Decree, unless otherwise provided in this Appendix. Whenever the terms set forth below are used in this Appendix, the following definitions shall apply:

- a. "Closed Vent System" shall have the meaning in 40 C.F.R. Part 63, Subpart SS.
- b. "Cryogenic Condenser Control System" shall mean the Cryogenic Condenser Control System used at the Facility to control emissions from Group 1 Storage Tanks.
- c. "Group 1 Storage Tanks" shall mean all Group 1 Storage Tanks, within the meaning of 40 C.F.R. Part 63, Subpart FFFF, at the Facility.
- d. "Normal Operations" shall mean all periods of operation, excluding malfunctions.
- e. "Peak Vapor Flow Rate" shall mean the maximum instantaneous amount of vapors routed to a Vapor Control System during Normal Operations, including working, breathing, and standing losses.
- f. "Tank Safety Devices" shall mean equipment designed to protect the structural integrity of a tank and/or designed to prevent or mitigate an explosion or fire, including, but not limited to: Pressure and Vacuum Relief Vents or Conservation Vents, Thief Hatches, Pressure Relief Vents, Flame Arresters, and Tank Blanketing Valves.
- g. "Thermal Oxidizer Control System" shall mean the Thermal Oxidizer Control System used at the Facility to control emissions from Group 1 Storage Tanks.
- h. "Vapor Control System" shall mean the system used to contain, convey, and control vapors from a Group 1 Storage Tank (including, working, breathing, and standing losses). A Vapor Control System includes the closed vent system, the control device and/or fittings, connectors, liquid knockout vessels or vapor control piping, Tank Safety Devices, and emission control devices.
- i. "VCS Root Cause Analysis" shall mean an assessment conducted through a process of investigation to determine the primary cause and contributing cause(s), if any, of VOC emissions from a Vapor Control System.

1. 3V must route all Regulated Material Vapors from its Group 1 Storage Tanks to the Thermal Oxidizer Control System or the Cryogenic Condenser Control System via a Closed Vent System.

A. PREVENTATIVE MAINTENANCE AND OPERATIONS PLAN

- 2. 3V has submitted to EPA for review and approval pursuant to Paragraph 21 of the Consent Decree, a written plan for the procurement, inspection, maintenance, and operation of all Tank Safety Devices that are part of the Group 1 Storage Tanks and associated Closed Vent Systems ("Tank PMOP").
- 3. The Tank PMOP required by Paragraph 2 must specify procedures for maintenance and operation of each Tank Safety Device that is part of a Group 1 Storage Tank or associated Closed Vent Systems in accordance with the manufacturer's recommendations. The Tank PMOP must include a schedule for routine and preventative maintenance.
- 4. The Tank PMOP required by Paragraph 2 shall include a plan and schedule to evaluate the condition of all Tank Safety Devices, mounting, and gaskets at each Group 1 Storage Tank. The evaluation shall include the following:
 - a. 3V shall ensure that every Tank Safety Device is either welded or mounted with a suitable gasket to the tank in order to prevent VOC emissions at the attachment point to the tank; and
 - b. If 3V observes VOC emissions from Tank Safety Devices and mountings and gaskets, 3V shall repair, replace, or upgrade, as appropriate, such Tank Safety Devices and mountings and gaskets.
- 5. On the dates and for the time periods set forth in Section IX (Reporting Requirements) 3V shall submit to EPA, in the manner set forth in Section XVI (Notices), a Compliance Status Report containing the following information: (i) all evaluations undertaken pursuant to the PMOP; and (ii) a description of all actions taken including, to the extent available, the approximate number of Tank Safety Devices replaced, the manufacturer(s) and model(s) of the Tank Safety Devices replaced and installed, the pressure set-points of the Tank Safety Devices replaced and installed, and the date range(s) when these Tank Safety Devices were replaced.
- 6. Upon approval of the Tank PMOP, 3V shall comply with its requirements at all times, including periods of startup, shutdown, and malfunction of the individual tanks.
- 7. 3V must review the Tank PMOP at least once each calendar year to determine if the information required by Paragraph 2 remains representative of current operating conditions at the Facility and all Group 1 Storage Tanks and Closed Vent Systems. 3V must update the information in the Tank PMOP required by Paragraph 3, within 60 Days of the Day 3V completes its review of the Tank PMOP.

B. LDAR REQUIREMENTS

- 8. One-Time Audit of Leak Detection Monitoring for Closed Vent Systems and Control Devices for Group 1 Storage Tanks. In accordance with the selection provisions set forth in Section VI of the Consent Decree (Compliance Evaluation and Audit Requirements), 3V shall retain an Independent Third Party to evaluate and ensure compliance of the Facility's Group 1 Storage Tanks and Closed Vent Systems with storage tank and equipment leak requirements of Subpart FFFF, including those incorporated from Subpart SS and Subpart UU ("Storage Tank Compliance Evaluation"). No later than March 31, 2023, 3V must submit to EPA, in accordance with Paragraph 17 of the Consent Decree, a list of proposed consultants to serve as the Independent Third Party for purposes of this Paragraph. The evaluation shall begin no later than 120 Days after EPA's approval under Paragraph 17(a) of the Consent Decree.
- 9. As part of the Storage Tank Compliance Evaluation required by Paragraph 8, the Independent Third Party must, at a minimum:
 - a. Inspect and monitor each Group 1 Storage Tank, each Closed Vent System associated with a Group 1 Storage Tank, and each piece of Equipment, including all hatches, vents, and relief devices, associated with a Group 1 Storage Tank or Closed Vent System;
 - b. For each Group 1 Storage Tank, each Closed Vent System associated with a Group 1 Storage Tank, and each piece of Equipment, including hatches, vents, and relief devices, associated with a Group 1 Storage Tank or Closed Vent System, evaluate inspection and monitoring requirements in accordance with the requirements in 40 C.F.R. Part 63, Subpart FFFF, including requirements incorporated by reference, and Paragraphs 4 8 of Appendix A to this Consent Decree;
 - c. Evaluate whether any Group 1 Storage Tank, Closed Vent Systems associated with a Group 1 Storage Tank, or Equipment, including all hatches, vents, and relief devices, associated with a Group 1 Storage Tank or Closed Vent System, is "Difficult-to-Monitor" or "Unsafe-to-Monitor" within the meaning of 40 C.F.R. § 63.983(b)(2) and (3);
 - d. Develop a Storage Tank and Closed Vent System Leak Detection and Repair Plan that provides for Quarterly OGI and Method 21 monitoring of Equipment on Group 1 Storage Tanks and associated Closed Vent Systems at the Covered Process Units (*e.g.*, emergency pressure relief vents/valves, conservation vents, and vacuum breakers) in accordance with Paragraph 10 of this Appendix and Paragraphs 4 8 of Appendix A to this Consent Decree. For equipment determined to be "Difficult-to-Monitor" or "Unsafe-to-Monitor" as part of the Storage Tank Compliance Evaluation, the plan shall evaluate and recommend alternative options for monitoring, including methods and frequency, that comply with the requirements in Subpart UU or Subpart SS, as applicable. In accordance with Paragraphs 9 27 of Appendix A to the Consent Decree, the plan shall also provide for repair of any leak on

equipment identified as having a Screening Value at or above the leak definitions in Table 2 of Appendix A or, if 3V has met the requirements in Paragraph 10 of Appendix A, in Table 3 of Appendix A.

- 10. 3V must ensure that all OGI inspections conducted pursuant to this Appendix, including the Plan required by Subparagraph 9.d., are performed in accordance with the following requirements:
 - a. All OGI cameras shall be capable of imaging organic gases that absorb infrared light in approximately the 3.2 to 3.4 micron range, and have an automatic mode (for thermal contrast and brightness) for OGI inspections;
 - b. All OGI inspections shall be conducted in automatic mode and in gray scale, and 3V shall select the polarity in order to achieve the maximum contrast of the VOCs with the sky background condition;
 - c. All OGI inspections shall be conducted at a distance of no greater than 50 feet from the vents, and 3V shall image all vents;
 - d. 3V shall conduct OGI inspections of tanks only when the tanks are idle (neither filling nor being drawn down); and
 - e. 3V shall conduct OGI inspections only at times when the wind speed is forecasted to be greater than 4 miles per hour and less than 12 miles per hour.

If the OGI camera operator observes emissions during the OGI inspections conducted pursuant to this Consent Decree, an OGI video recording shall be made immediately and during the inspection in which the operator observed emissions. If emissions are detected from Equipment during the OGI inspection, but were not detected under the Method 21/Subpart UU inspection of the same equipment, 3V shall determine the exact component that is the source of the emissions and conduct a follow-up Method 21/Subpart UU inspection of that equipment within 24 hours and comply with Paragraphs 9 – 27 of Appendix A.

- 11. <u>Repair of Equipment Leaks Identified in Storage Tank Compliance</u>
 <u>Evaluation</u>. For any Equipment on Group 1 Storage Tanks or associated Closed Vent Systems at the Covered Process Units with a Screening Value at or above 250 ppm during the Audit required by Paragraph 8, 3V shall repair that leak in accordance with Paragraphs 9 27, 30, and 31 of Appendix A to the Consent Decree.
- Days of completion of the Storage Tank Compliance Evaluation, the Independent Third Party shall submit to 3V a draft Storage Tank Compliance Evaluation Report ("Draft Storage Tank Report"), which includes the Storage Tank and Closed Vent System Leak Detection and Repair Plan required by Subparagraph 9.d. If the Storage Tank Compliance Evaluation conducted by the Independent Third Party determines that inspection and monitoring requirements are not applicable to any Equipment, including hatches, vents, relief devices, and Closed Vent Systems associated with a Group 1 Storage Tank because of the provision in 40 C.F.R. § 63.1019(d), the Draft Storage

Tank Report shall include documentation that the Group 1 Storage Tank is only in regulated material service less than 300 hours per calendar year, and describe all actions taken to remove the tank from regulated material service. 3V shall have 45 Days to review and provide written comments to the Independent Third Party on its Draft Storage Tank Report. The Independent Third Party is not obligated to make any changes to the Draft Storage Tank Report it does not find to be objectively substantiated. The Independent Third Party's final Storage Tank Compliance Evaluation Report ("Final Storage Tank Report"), along with separate documents containing copies of the written comments made by 3V and the Independent Third Party's responses to any of 3V's comments and written explanations of resulting modifications, if any, made to the Final Storage Tank Report, shall be provided to 3V and EPA within 45 Days after the deadline for 3V to submit written comments.

13. Upon receipt of the Final Storage Tank Report, 3V shall monitor its Group 1 Storage Tanks and Closed Vent System in accordance with the provisions in the Storage Tank Leak Detection and Repair Plan. 3V shall incorporate the Storage Tank Leak Detection and Repair Plan into the LDAR Program and Resource Allocation Plan required by Paragraphs 2 and 3 of Appendix A to this Consent Decree and into all LDAR Audits required under Appendix A.

C. VAPOR CONTROL SYSTEM EVALUATION

- 14. In accordance with the selection provisions set forth in Section VI of the Consent Decree (Compliance Evaluation and Audit Requirements), 3V shall retain an Independent Third Party to conduct a Vapor Control System Evaluation of the Group 1 Storage Tanks to determine if each existing Vapor Control System is adequately designed to handle Peak Vapor Flow Rates and determine whether all Regulated Material Vapors are being routed from the emission points to the thermal oxidizer or cryogenic condenser. No later than March 31, 2023, 3V must submit to EPA, in accordance with Paragraph 17 of the Consent Decree, a list of proposed consultants to serve as the Independent Third Party for purposes of this Paragraph. The Vapor Control System Evaluation shall begin no later than 120 Days after EPA's approval under Paragraph 17(a) of the Consent Decree.
 - 15. The Vapor Control System Evaluation must consider the following:
 - a. Storage Tanks: Stored material maximum vapor pressure;
 - b. Storage Tanks: Peak Vapor Flow Rate;
 - c. Storage Tanks: Vent Sizing;
 - d. Storage Tanks: Pressure and vacuum settings for Tank Safety Devices;
 - e. Storage Tanks: Blanket gas flow rate and control;
 - f. Closed Vent System: Size and design of the piping system between the Storage tank(s) and the emission control device;

- g. Pressure drop across Vapor Control System;
- h. Control Device set points (*e.g.*, for compressor, blower with fan) and operating range, collectively considering all Closed Vent Systems gases routed to the control device; and
- i. Identification of by-pass lines that may divert Closed Vent System gas from the control device.
- 16. <u>Vapor Control System Evaluation Report</u>. 3V's contract with the Independent Third Party shall require that within 60 Days of completion of the Vapor Control System Evaluation, the Independent Third Party shall submit a Vapor Control System Evaluation Report to 3V and EPA, along with supporting calculations, a detailed description of how the evaluation was undertaken, and identification of any identified deficiencies with the design or operation of 3V's Vapor Control System.

17. <u>Corrective Action Plan ("CAP")</u>.

- By no later than 30 Days after completion of the Vapor Control System Evaluation Report, 3V shall develop a preliminary CAP if: (i) the Vapor Control System Evaluation determines that not all Regulated Material Vapors are being routed to the Thermal Oxidizer Control System or the Cryogenic Condenser Control System; or (ii) the Report identifies other deficiencies with the design or operation of 3V's Vapor Control System. The preliminary CAP shall describe the actions that 3V has taken or shall take to: (i) address identified deficiencies; (ii) ensure all Regulated Material Vapors are being directed to the Thermal Oxidizer Control System or the Cryogenic Condenser Control System via fully-enclosed piping; and/or (iii) otherwise control emissions from the Group 1 Storage Tanks in accordance with the requirements in Subpart FFFF. 3V shall include a schedule by which actions that have not yet been completed shall be completed. For any corrective actions that are not expected to be completed within 90 Days of the Vapor Balance Evaluation Report, the preliminary CAP shall explain why, and shall propose a schedule for prompt completion of the action(s) in the final CAP.
- b. Within 45 Days of completion of the Vapor Control System Evaluation Report, 3V shall submit to EPA the preliminary CAP. For any corrective actions that have not been completed by the time of due date of the preliminary CAP, the preliminary CAP shall include a schedule by which those actions shall promptly be completed. EPA may submit comments on the preliminary CAP.
- c. <u>Submission of the Final CAP to EPA</u>. By no later than 60 Days after EPA provides comments on the preliminary CAP or notifies 3V that it will not provide comments, 3V shall submit the final CAP to EPA. The Final CAP must respond to all EPA comments on the preliminary CAP. If any action is not completed within 90 Days of completion of the Vapor Control System

Evaluation Report, 3V shall explain the reasons, together with a proposed schedule for prompt completion. 3V shall submit a supplemental certification of completion by no later than 30 Days after completing all actions.

18. <u>Vapor Control System Verification.</u> No later than 30 days after completion of the Final CAP, 3V shall conduct an OGI or Method 21 inspection of the Vapor Control System during Normal Operations. Should the OGI or Method 21 inspection detect emissions from the Vapor Control System, 3V must perform a VCS Root Cause Analysis, and complete all necessary corrective actions to address the emissions.

APPENDIX C

WASTEWATER

<u>Definitions</u>. Terms used in this Appendix that are defined in the Act or in regulations promulgated pursuant to the Act or in the Consent Decree shall have the meanings assigned to them in the Act or such regulations or in the Decree, unless otherwise provided in this Appendix. Whenever the terms set forth below are used in this Appendix, the following definitions shall apply:

- a. "Group 1 Wastewater Stream" shall have the meaning set forth in 40 C.F.R. Section 63.2550
- b. "Group 2 Wastewater Stream" shall have the meaning set forth in 40 C.F.R. Section 63.2550.
- c. "MON Inspection Tool" shall mean EPA's "Inspection Tool for the Miscellaneous Organic Chemical Manufacturing NESHAP," EPA-305-B-06-002, September 2006, Section 5.
- d. "Operating Scenario" shall have the meaning set forth in 40 C.F.R. § 63.2550(i).
- e. "Point of Determination" shall have the meaning set forth in 40 C.F.R. § 63.2550(i).
- f. "Process Change" shall mean a change to an existing MON Process, or an addition of a new MON Process, at the Facility that is not within the scope of an existing Operating Scenario reported by 3V pursuant to 40 C.F.R. §§ 63.2520 and 63.2525. A Process Change does not include moving within a range of conditions identified in the standard batch, or a nonstandard batch.
- g. "Steam Stripper" shall mean the Facility's packed-bed steam stripper, identified as C303 on Process & Instrumentation Diagrams for the Facility.
- h. "Waste Management Unit" or "WMU" shall have the meaning set forth in 40 C.F.R. Section 63.2550(i).
- i. "Wastewater" shall have the meaning set forth in 40 C.F.R. Section 63.2550(i).
- j. "Wastewater Personnel" shall mean all 3V employees and contractors who perform any of the following activities at the Facility for the purpose of complying with the wastewater requirements in 40 C.F.R. Part 63, Subpart FFFF: determine when and where Wastewater samples should be collected; collect Wastewater samples; or analyze Wastewater samples.

- k. "Wastewater Stream" shall have the meaning set forth in 40 C.F.R. Section 63.2550(i).
- l. "WMU Vent" shall mean a device, such as a pressure relief device, associated with a WMU that is designed to vent to prevent physical damage to or permanent deformation of the Waste Management Unit in accordance with good engineering practices, and all components necessary for the installation or operation of the vent on tank.

A. WASTEWATER COMPLIANCE EVALUATION

- Wastewater Compliance Evaluation Plan. In accordance with the selection 1. provisions set forth in Section VI of this Consent Decree (Compliance Evaluation and Audit Requirements), 3V shall retain an Independent Third Party to conduct the compliance evaluations set forth in Paragraphs 2 (Wastewater Group Status Evaluation) and 4 (Wastewater Control Evaluation). No later than March 31, 2023, 3V must submit to EPA, in accordance with Paragraph 17 of the Consent Decree, a list of proposed consultants to serve as the Independent Third Party for purposes of this Paragraph. 3V's contract with the Independent Third Party shall require the Independent Third Party to prepare a proposed plan (Wastewater Compliance Evaluation Plan) for conducting the evaluation that complies with Paragraphs 2 and 4, including a proposed schedule, and submit the proposed plan to EPA for review and approval in accordance with Paragraph 21 of the Consent Decree within 60 Days after the Independent Third Party is retained. The Plan shall include provision for all sampling required as part of the Wastewater Compliance Evaluation to be performed in accordance with a quality assurance plan for collection and analysis of Wastewater samples, and to be performed at a laboratory with a documented Quality Assurance System that complies with ASQ/ANSI E4:2014 "Quality Management Systems for Environmental Information and Technology Programs – Requirements with Guidance for Use" (American Society for Quality, February 2014) and "EPA Requirements for Quality Management Plans (QA/R-2" EPA/240/B-01/002 (March 2001, reissued May 2006) or equivalent documentation as determined by EPA. The Plan shall provide for evaluation within 60 days of all Wastewater Streams generated by any MON Process not evaluated for Wastewater Stream Group Status under the initial Evaluation required by Paragraph 2.
- 2. <u>Wastewater Group Status Evaluation</u>. The Wastewater Compliance Evaluation Plan must provide for the performance of an initial determination of the group status of each Wastewater Stream generated by a MON Process in accordance with this Paragraph. This Wastewater Group Status Evaluation shall commence no later than 30 Days following approval of the Wastewater Compliance Evaluation Plan by EPA, and shall be completed within 120 Days. The Wastewater Group Status Evaluation shall include the following elements:
 - a. Identification of all Wastewater Streams at the Facility;
 - b. Identification of each Process Wastewater Stream, Maintenance Wastewater Stream, and Liquid Stream in Open Systems within any MCPU, including identification of each Point of Determination for each Process Wastewater Stream;

- c. Identification and verification of the group status of each Process Wastewater Stream, in accordance with the criteria set forth in 40 C.F.R. § 63.2485(c), the procedures set forth in 40 C.F.R. § 63.144(b) (using test data from sampling under 40 C.F.R. § 63.144(b)(5)) and 40 C.F.R. § 63.144(c), and the MON Inspection Tool; and
- d. Submission of a Wastewater Group Status Evaluation Report, including all supporting sampling analyses and all information required by Subparagraphs 2.a 2.c above and by the Wastewater Compliance Evaluation Plan, to 3V and EPA within 30 Days of completion of the Evaluation and receipt of sampling data and final reports.
- 3. Should the Wastewater Group Status Evaluation Report determine that all Wastewater Streams at the Facility are Group 2 Wastewater Streams, 3V will not be required to perform the Wastewater Control Evaluation in Paragraph 4, except as provided by Paragraph 7 (Process Changes). If EPA disputes a determination in the Wastewater Group Status Evaluation Report that any Wastewater Stream is a Group 2 Wastewater Stream, 3V shall be required to commence the Wastewater Control Evaluation for any such disputed Wastewater Stream(s) until and unless the dispute is resolved.
- 4. <u>Wastewater Control Evaluation.</u> The Wastewater Compliance Evaluation Plan must provide for the performance of an evaluation of the control of any Wastewater Stream determined to be a Group 1 Wastewater Stream in the Wastewater Group Status Evaluation Report. This Wastewater Control Evaluation shall commence no later than 30 Days following the completion of the Wastewater Group Status Evaluation Report, and shall be completed within 90 Days of commencement. The Wastewater Control Evaluation shall include the following elements:
 - a. Evaluation of whether or not each Process Wastewater Stream is controlled in compliance with the applicable requirements of Subpart FFFF utilizing the procedures in the MON Inspection Tool;
 - b. Should any Process Wastewater Stream be identified as non-compliant with the applicable control requirements of Subpart FFFF, identification of applicable control methods that would comply with Subpart FFFF and any required compliance demonstrations for such methods;
 - c. Identification of any existing noncompliance with the Wastewater requirements of Subpart FFFF, including with compliance demonstration requirements for existing treatment processes or control devices;
 - d. Identification of all Waste Management Units (WMUs), including Wastewater tanks, surface impoundments, containers, organic-water separators, drain systems, biological Wastewater treatment units, and treatment processes, including organic removal devices such as the Steam Stripper and associated condenser, and evaluation of whether or not each WMU is operated, maintained, and controlled in compliance with the applicable requirements of Subpart FFFF; and

e. Submission of a Wastewater Control Evaluation Report ("Wastewater Control Report"), including all supporting sampling analyses and all information required by Subparagraphs 4.a – 4.d above and by the Wastewater Compliance Evaluation Plan, to 3V and EPA within 60 Days of completion of the Evaluation and receipt of final data.

5. Corrective Action Plan ("CAP").

- 3V shall develop a preliminary CAP if the Wastewater Control Report identifies any suspected areas of noncompliance (AONs) in 3V's Group 1 Wastewater control practices. The preliminary CAP shall describe the actions that 3V has taken or shall take to address identified AONs. Should 3V elect to address identified AONs by eliminating all Group 1 Wastewater Streams, it must submit a certified statement by an officer or director of 3V as part of the preliminary CAP that the Facility no longer generates any Group 1 Wastewater Streams, describes the measures it has taken to terminate all Group 1 Streams, and attaches supporting documentation and sampling analyses performed in accordance with the requirements in Paragraph 1. Should 3V implement new control devices or treatment processes to comply with control requirements under Subpart FFFF, the preliminary CAP must identify all compliance demonstrations required under 40 C.F.R. § 63.145. 3V shall include a schedule by which actions that have not yet been completed shall be completed. For any corrective actions that are not expected to be completed within 90 Days of the Wastewater Control Report, the preliminary CAP shall explain why, and shall propose a schedule for prompt completion of the action(s) in the final CAP.
- b. Within 45 Days of completion of the Wastewater Control Report, 3V shall submit to EPA the preliminary CAP. For any corrective actions that have not been completed by the time of due date of the preliminary CAP, the preliminary CAP shall include a schedule by which those actions shall promptly be completed. EPA may submit comments on the preliminary CAP.
- c. <u>Submission of the Final CAP to EPA</u>. By no later than 60 Days after EPA provides comments on the preliminary CAP or notifies 3V that it will not provide comments, 3V shall submit the Final CAP to EPA, together with a certification of the completion of each item of corrective action or a detailed schedule that 3V shall implement to ensure compliance with MON Wastewater requirements as soon as practicable. The Final CAP must respond to all comments on the preliminary CAP. The Final CAP shall identify with specificity any new control or compliance strategies for Wastewater Streams implemented at the Facility, including identifying any compliance demonstrations required under 40 C.F.R. § 63.145. If any action is not completed within 120 Days of completion of the Wastewater Control Report, 3V shall explain the reasons, together with a proposed schedule for prompt completion. 3V shall submit a supplemental certification of completion by no later than 30 Days after completing all actions.

6. <u>Steam Stripper Compliance Evaluation.</u> If a Wastewater Control Evaluation or Wastewater Control Report conducted pursuant to Paragraphs 4 or 7 identifies that the Steam Stripper is used to control any Wastewater Stream to comply with the applicable requirements of Subpart FFFF, 3V must conduct a performance test of the Steam Stripper in accordance with 40 C.F.R. § 63.145. 3V must include the performance test in the schedule provided in any preliminary CAP. 3V must submit the results of the performance test, including all supporting sampling analyses, to EPA within 90 Days of the submission of the Wastewater Control Report.

7. Process Changes.

- a. If 3V makes a Process Change at the Facility after it has completed initial evaluations required by Paragraphs 2 and 4, 3V shall retain a third-party consultant to undertake a Wastewater Group Status Evaluation in accordance with Paragraph 2 for any new or modified Wastewater Streams or Points of Determination and, if applicable, a Wastewater Control Evaluation in accordance with Paragraph 4 for any new or modified Wastewater Streams or for any new or modified controls for Group 1 Wastewater Streams. The evaluation must commence within 60 Days of implementing the Process Change. If a Wastewater Control Evaluation conducted pursuant to this Paragraph identifies any deficiencies in 3V's Group 1 Wastewater Control Practices, then 3V must prepare a CAP in accordance with Paragraph 5.
- b. If 3V was not initially required to perform a Wastewater Control Evaluation pursuant to Paragraph 3, but is required to do one following a Process Change, 3V must retain an Independent Third Party to conduct the evaluation in accordance with Paragraph 4.
- c. 3V must notify EPA 60 Days prior to the implementation of any Process Change that includes addition of a new MON Process, a new or modified Wastewater Stream or Point of Determination, or new or modified controls for an existing Group 1 Wastewater Stream. 3V must provide any documents describing the Process Change that 3V is required to submit pursuant to 40 C.F.R. § 63.2520(e)(10). With the notification, 3V must submit to EPA, for review and approval pursuant to Paragraph 21 of the Consent Decree, a Compliance Evaluation Plan setting forth which evaluations under Paragraph 2 and 4 are required by this Paragraph, the scope of such evaluations, and a proposed schedule.
- 8. <u>Update of Notification of Compliance Status ("NOCS") Reports</u>. If any evaluations completed under this Appendix determine that information in 3V's current NOCS Report is incorrect or out of date, 3V must submit updated NOCS Reports to EPA and SC DHEC within 30 Days of the following milestones:
 - a. Submission of a Wastewater Group Status Evaluation Report pursuant to Paragraph 2 that determines all Wastewater Streams are Group 2 Wastewater Streams;

b. Completion of all actions identified in a Final CAP following a Wastewater Control Evaluation.

B. WASTEWATER MANAGEMENT UNIT VENT REQUIREMENTS

- 9. In the event that the initial Wastewater Group Status Evaluation, or any subsequent Group Status Evaluation, determines that any Wastewater Stream at the Facility is Group 1, 3V shall undertake the measures in Paragraphs 10 15.
- 10. <u>WMU Preventative Maintenance & Operations Program.</u> Commencing no later than 30 Days after completion of the Wastewater Group Status Evaluation, 3V shall develop and submit to EPA, for review and approval pursuant to Paragraph 21 of the Consent Decree, a written plan for the inspection, maintenance, and operation of vents on WMUs controlling Group 1 Wastewater Streams ("WMU PMOP").
- 11. The WMU PMOP required by Paragraph 9 must specify procedures for maintenance and operation of each vent and pressure relief device and associated closure devices in accordance with the manufacturer's recommendations. The WMU PMOP must include a schedule for routine and preventative maintenance.
- 12. Upon approval of the WMU PMOP, 3V shall comply with its requirements at all times, including periods of startup, shutdown, and malfunction of the individual tanks.
- 13. 3V must review the WMU PMOP at least once each calendar year to determine if the information required by Paragraph 11 remains representative of current operating conditions at the Facility. 3V must modify and update the information in the WMU PMOP required by Paragraph 10, within 60 Days of the Day 3V completes its review of the WMU PMOP.
- 14. <u>Leak Detection and Repair Program.</u> Commencing no later than 45 days after completion of the Wastewater Group Status Evaluation, 3V shall conduct Quarterly Method 21 monitoring of Vents on WMUs controlling Group 1 Wastewater Streams at the Facility in accordance with the requirements of Paragraphs 4 8 of Appendix A to this Consent Decree. For any equipment specified in this Paragraph that has a Screening Value at or above 500 ppm, 3V shall repair that leak in accordance with Paragraphs 9 27 of Appendix A to this Consent Decree. 3V shall incorporate the monitoring required by this Paragraph into the LDAR Program and Resource Allocation Plan required by Paragraphs 2 and 3 of Appendix A to this Consent Decree.
- 15. <u>Fixed Roof Requirements</u>. No later than 180 Days after completion of the Wastewater Group Status Evaluation, 3V shall identify and remove all Gooseneck Vents on WMUs controlling Group 1 Wastewater Streams at the Facility and ensure that all openings on fixed roofs of WMUs controlling Group 1 Wastewater Streams have a closure device or cover that is closed when not in use as required by 40 C.F.R. § 63.133, such as a conservation vent.

C. MANAGEMENT OF CHANGE, CERTIFICATIONS, AND TRAINING

- Management of Change. Beginning no later than March 31, 2023, 3V shall implement a "Management of Change Protocol" that shall incorporate the requirements of Paragraph 7 (Process Changes) and ensure that each time a new MON Process is added, a MON Process is discontinued, or a MON Process Change occurs at the Facility, 3V evaluates whether: (i) any new Wastewater Streams are generated and, if so, determines or designates the group status of such Streams; (ii) any existing Wastewater Streams are discontinued or group status is affected; and (iii) any control options for Wastewater and WMUs need adjustment. This evaluation shall be a part of 3V's facility-wide Management of Change Protocol.
- EPA for review and approval, a training protocol for Wastewater Personnel. The training protocol must provide for training for all Wastewater Personnel on the following tasks and procedures: collection, storage, transport, and analysis of Wastewater samples at the Facility for the purpose of MON compliance. The protocol must provide for initial training for Wastewater Personnel within 90 Days of EPA's approval of the protocol, annual refresher training for existing Wastewater Personnel, and initial training for new Wastewater Personnel prior to undertaking any tasks related to collection, storage, transport, or analysis of Wastewater samples at the Facility for the purpose of MON compliance. Upon approval by EPA, 3V shall conduct training for all Wastewater sampling collection, storage, transportation, and analysis tasks in accordance with the approved training protocol.