

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

August 17, 2018

Scott Hansen Operations Director INEOS Melamines, LLC 730-B Worcester Street Springfield, MA 01151

Re: 310 CMR 7.00 – APPENDIX C Appl. #WE-17-018; Trans. # X276332 FINAL OPERATING PERMIT MINOR MODIFICATION

At: INEOS Melamines, LLC 730-B Worcester Street Springfield, MA 01151

Dear Mr. Hansen:

In accordance with 310 CMR 7.00—APPENDIX C(6) of the Air Pollution Control Regulations ("the Regulations"), the Department of Environmental Protection ("Department") is forwarding to EPA the attached FINAL Operating Permit Minor Modification for the INEOS Melamines, LLC facility located at 730-B Worcester Street in Springfield, Massachusetts.

On June 4, 2018, the MassDEP forwarded to EPA Region 1 and the affected states, via electronic mail, the Proposed Draft Operating Permit Minor Modification for this facility. EPA did not object or comment on the Proposed Draft. Therefore, the MassDEP is issuing the Final Operating Permit.

The attached FINAL Operating Permit contains all of the federal and state air pollution control requirements to which the facility is subject and the terms and conditions for compliance with such applicable requirements.

If you have any questions concerning this FINAL Operating Permit, please contact Amy Stratford of the Western Regional Office at (413) 755-2144.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Marc Simpson Air Quality Permit Chief Western Region

ecc: Donald Dahl, USEPA Region 1 Peter Czapienski, MassDEP, WERO Yi Tian, MassDEP, Boston

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep



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UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA, Plaintiff, v. SOLUTIA INC. and INEOS MELAMINES LLC, Defendants.

C.A. No. 12 CN 12377-NAP

CONSENT DECREE

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CONSENT DECREE

WHEREAS, Plaintiff the United States of America ("United States"), on behalf of the United States Environmental Protection Agency ("EPA"), has filed a complaint against Solutia Inc. ("Solutia") and INEOS Melamines LLC ("INEOS") concurrently with the lodging of this Consent Decree;

WHEREAS the Complaint concerns the facility owned and/or operated by Solutia at the Indian Orchard plant in Springfield, Massachusetts, and the facility owned and/or operated by INEOS at the Indian Orchard plant in Springfield, Massachusetts;

WHEREAS, the Complaint alleges that Solutia and INEOS have violated Sections 112 and 502 of the Clean Air Act ("CAA" or the "Act"), 42 U.S.C. §§ 7412 and 7661a, and one or more of the following implementing regulations: 40 C.F.R. Part 60, Appendix A-7, Method 21 (Determination of Volatile Organic Compounds Leaks); 40 C.F.R. Part 63, Subpart OOO, 40 C.F.R. §§ 63.1400-63.1419 (National Emission Standards for Hazardous Pollutant Emissions: Manufacture of Amino/Phenolic Resins); 40 C.F.R. Part 63, Subpart UU, 40 C.F.R. §§ 63.1019 – 63.1039 (National Emission Standards for Equipment Leaks); and 40 C.F.R. § 70.7(b) (Permit Issuance, Renewal, Reopenings, and Revisions);

WHEREAS, the Complaint also alleges that Solutia and INEOS violated the Final Reasonably Available Control Technology ("RACT") Compliance Plan Conditional Approval (the "RACT Permit") issued by the Massachusetts Department of Environmental Protection ("Massachusetts DEP") on June 20, 1989 to Monsanto Chemical Company, a predecessor-ininterest to Solutia at the Indian Orchard plant in Springfield, Massachusetts;

WHEREAS, the Complaint also alleges that Solutia and INEOS violated the Air Quality Operating Permit issued to Solutia on June 26, 2005 by the Massachusetts DEP pursuant to Title V of the CAA and 310 C.M.R. 7.00: Appendix C;

WHEREAS, Solutia and INEOS do not admit to any liability to the United States arising out of the transactions or occurrences alleged in the Complaint or arising from the allegations of violations of the foregoing federal statutory and regulatory provisions, and/or the foregoing permit provisions incorporating and implementing federal requirements, and nothing in the Complaint or in this Consent Decree, or in the execution and implementation of this Consent Decree, shall be treated as an admission of any violation of federal or state law or regulation in any litigation or forum whatsoever, except that the terms of this Consent Decree and either Company's failure to comply with the terms and conditions thereof may be used by the United States in any action or dispute resolution proceeding to enforce the terms of this Consent Decree or as otherwise permitted by law, and the Companies may use the terms of this Consent Decree in any such action or proceeding or as otherwise permitted by law;

WHEREAS, the United States, Solutia, and INEOS (jointly, the "Parties") recognize, and this 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;

WHEREAS, the Parties agree that: (i) settlement of the matters set forth in the Complaint is in the best interests of the Parties and the public; and (ii) entry of this Consent Decree without litigation is the most appropriate means of resolving this matter;

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 CAA, 42 U.S.C. § 7413(b). This Court has jurisdiction over the Parties. Venue lies in this District pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and 1395 because Solutia and INEOS reside and are located in this judicial district and the violations alleged in the Complaint are alleged to have occurred in this judicial district. For purposes of this Decree, or any action to enforce this Decree, Solutia and INEOS consent to this Court's jurisdiction over this Decree, over any action to enforce this Decree, and over Solutia and INEOS. Solutia and INEOS also consent to venue in this judicial district.

2. For purposes of this Consent Decree, Solutia and INEOS do not contest that the Complaint states claims upon which relief may be granted pursuant to Sections 112 and 502 of the CAA, 42 U.S.C. §§ 7412 and 7661a.

3. Notice of the commencement of this action has been given to the Commonwealth of Massachusetts as required by Section 113(b) of the CAA, 42 U.S.C. § 7413(b).

II. <u>APPLICABILITY</u>

4. The obligations of this Consent Decree apply to and are binding upon the United States and upon Solutia and INEOS and any successors, assigns, and other entities or persons otherwise bound by law.

5. No transfer of ownership or operation of the Facility or any portion of the Facility that is subject to Leak Detection and Repair ("LDAR"), as defined in Subparagraph III.9.s, whether in compliance with the procedures of this Paragraphs 5 and 6 below or otherwise, shall relieve Solutia or INEOS of its obligations to ensure that the terms of this Consent Decree are

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implemented unless and until:

a. The transferee agrees in writing to undertake the applicable obligations required by this Consent Decree with respect to the Facility or any portion of the Facility that is subject to LDAR, and to intervene in this action as a party for the purpose of being bound by the applicable terms of this Consent Decree; and

b. The United States, after receiving information sufficient to demonstrate that the transferee has the technical and financial means to comply with the applicable obligations of this Consent Decree, consents in writing to substitute the transferee for Solutia and/or INEOS with respect to such obligations.

6. By no less than thirty (30) days prior to the transfer of the ownership or operation of the Facility or any portion of the Facility that is subject to LDAR, Solutia and/or INEOS shall provide a copy of this Consent Decree to the proposed transferee and also shall provide written notice of the prospective transfer, together with a copy of all portions of the proposed written agreement between Solutia and/or INEOS and the prospective transferee related to environmental compliance, to EPA, the United States Attorney for the District of Massachusetts, and the United States Department of Justice, in accordance with Section XII of this Decree (Notices). Any attempt to transfer ownership or operation of the Facility or any portion of the Facility that is subject to LDAR without complying with this Paragraph constitutes a violation of this Decree.

7. Solutia and INEOS shall provide a copy of all relevant portions 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. The foregoing requirement may be satisfied by hard copy, electronic

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copy, or by providing on-line access with notice to the affected personnel. Solutia and INEOS shall condition any such contract with any such contractor upon performance of the work in conformity with the applicable terms of this Consent Decree.

8. In any action to enforce this Consent Decree, neither Solutia nor INEOS shall 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. <u>DEFINITIONS</u>

9. Terms used in this Consent Decree that are defined in the CAA or in federal and state regulations promulgated pursuant to the CAA shall have the meaning assigned to them in the relevant portions of the CAA or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "A&P MACT Connectors" shall mean connectors subject to the requirements of the National Emission Standards for the Manufacture of Amino/Phenolic Resins, 40 C.F.R. Part 63, Subpart OOO.

b. "Average" shall mean the arithmetic mean.

c. "Company" or "Companies" shall mean Solutia and INEOS or either of

them.

d. **"Complaint"** shall mean the Complaint filed by the United States in this action.

e. **"Consent Decree"** or **"Decree"** shall mean this Consent Decree and all appendices attached hereto, 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.

f. **"Control Valve"** shall mean a valve that controls pressure or flow by fully or partially opening or closing.

g. "Covered Equipment" shall mean all valves, connectors, pumps, agitators, Self-Relieving Manways, and Open-Ended Line closure devices in all Covered Process Units that are in regulated material service such that they are regulated under any federal or state leak detection and repair program. "Covered Equipment" shall include Self-Relieving Manways but shall not include pressure relief devices, including pressure relief valves or any other equipment that is expressly exempt or excluded from federal or state leak detection and repair programs.

h. **"Covered Facilities"** shall mean the facility owned or operated by Solutia at the Indian Orchard plant in Springfield, Massachusetts (the **"Solutia Facility"**) and the facility owned or operated by INEOS at the Indian Orchard plant in Springfield, Massachusetts (the **"INEOS Facility"**), as of the Effective Date. Each of the Solutia Facility and the INEOS Facility may be referred to independently herein as the **"Facility**."

i. **"Covered Process Unit or Units"** shall include the following manufacturing areas of the Covered Facilities:

- At the Solutia Facility, the term means the South Butvar, GME, RB-9100, and GMS Units, as described in Sections III, VI, VII, and VIII of the Operating Permit.
- b. At the INEOS Facility, the term means the Resimenes Unit, as described in Section IV of the Operating Permit.

j. "Date of Lodging of this Consent Decree" or "Date of Lodging" shall mean the date that the United States files a "Notice of Lodging" of this Consent Decree with the

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Clerk of this Court for the purpose of providing notice and comment to the public.

k. **"Day"** shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall include the next day that is not a Saturday, Sunday, or federal holiday. For all other purposes, "day" shall have the meaning provided in the applicable LDAR provisions.

I. **"DOR"** shall mean Delay of Repair.

m. **"Effective Date"** shall have the meaning given in Section XIII of this Consent Decree.

n. **"Enhanced LDAR Program"** or **"ELP"** shall mean the provisions in this Consent Decree set forth at Section V of this Decree.

o. **"EPA"** shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.

p. **"Existing Valve"** or **"Existing Valves"** shall have the meaning provided in Paragraph V.G.34.a of this Consent Decree.

q. **"Facility"** shall mean the Solutia Facility and/or the INEOS Facility.

r. "Formaldehyde-Service Equipment" or "FSE" shall mean Covered

Equipment that both: (i) contains or contacts a fluid in liquid or gaseous form containing formaldehyde in an amount that is at least 5% by weight, such that it is subject to the equipment leak provisions of 40 C.F.R. Part 63, Subpart OOO; and (ii) contains or contacts a fluid in liquid or gaseous form containing any total organic hazardous air pollutant, as determined according to the provisions of 40 C.F.R. § 63.180(d), in a concentration of less than 5% by weight, other than formaldehyde.

s. "LDAR" shall mean Leak Detection and Repair.

t. "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.

u. "LDAR Audit Completion Date" or "Completion of an LDAR Audit"

shall mean the date that is three (3) months after the LDAR Audit Commencement Date.

v. **"LDAR Personnel"** shall mean all Solutia and/or INEOS contractors and employees who perform substantive LDAR monitoring, LDAR data input, leak repairs on equipment subject to LDAR, and/or any other substantive field duties generated by LDAR requirements. Personnel whose functions involve only administrative (non-substantive) LDAR duties are not included in the definition of LDAR Personnel.

w. "Low-Emission Valve" shall mean:

- a. a valve (including its specific packing assembly) for which the manufacturer has issued a written warranty that it will not emit fugitives at 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 Emission" by reason of written warranty unless the valve (including its specific packing assembly) either:
 - 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. is an Extension of another valve that qualified as "Low Emission" under this definition; or
- b. A valve (including its specific packing assembly) that:
 - i. has been tested by the manufacturer or a qualified testing firm pursuant to generally accepted good engineering practices for testing fugitive emissions, and at no time during the test leaked at greater than 500 ppm, and on Average, leaked at less than 100 ppm; or
 - ii. is an Extension of another valve that qualified as "Low Emission" under this definition.

For purposes of this definition, "**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.

x. **"Low-Emission Packing Technology**" shall mean valve packing technology for which a manufacturer has issued either:

a. 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 greater than 100 ppm, and that, if it does so emit at any time in the first five (5) years, the

manufacturer will replace the product; provided however, that no packing product shall qualify as "Low Emission" 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 technology; or

a valve packing product, independent of any specific valve, that (i)
has been tested by the manufacturer or a qualified testing firm
pursuant to generally accepted good engineering practices for
testing fugitive emissions, and (ii) at no time during the test leaked
at greater than 500 ppm, and on Average, leaked at less than 100
ppm.

y. "Maintenance Shutdown" shall mean the shutdown of a Covered Process Unit that is done for the purpose of scheduled maintenance and lasts longer than twentyfour (24) hours, or is unscheduled and lasts longer than fourteen (14) calendar days.

z. "**Method 21**" shall mean the test method found at 40 C.F.R. Part 60, Appendix A, Method 21. To the extent that Covered Equipment includes FSE, the methodology specified in Paragraph V.D.22 of this Consent Decree shall be used.

aa. **"Month"** or **"monthly"** shall mean calendar month, except as otherwise provided in applicable LDAR provisions.

bb. "New Valve" or "New Valves" shall mean a newly installed valve that is Covered Equipment and replaces an Existing Valve as that term is defined in Paragraph V.G.34.

cc. "OEL" or "Open-Ended Line" shall mean an open-ended valve or line,

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except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

dd. "OELCD" shall mean an open-ended valve or line at the closure device (*e.g.*, secondary valves, caps, blind flanges, or plugs on OELs, that are not considered connectors).

ee. **"Operating Permit"** shall mean the Air Quality Operating Permit issued by the Massachusetts DEP for the Facility, dated January 26, 2005, as the same may be amended from time to time.

ff. **"Paragraph"** shall mean a portion of this Consent Decree identified by an Arabic numeral.

gg. "Parties" shall mean the United States, Solutia, and INEOS.

hh. "Quarter" or "quarterly" shall mean a calendar quarter (January through March, April through June, July through September, October through December) except as otherwise provided in applicable LDAR provisions.

ii. **"Repair Verification Monitoring"** shall mean the use of monitoring (or other method that indicates the relative size of the leak) by the end of the next business day following 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 ELP.

jj. "Screening Value" shall mean the highest emission level that is recorded at each piece of equipment as it is monitored in compliance with Method 21.

kk. "Section" shall mean a portion of this Consent Decree that has a heading identified by an upper case Roman numeral.

II. "Self-Relieving Manway" shall mean a manhole on a storage tank

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serving as a closure device which functions exclusively to prevent physical damage or permanent deformation to a storage tank during unsafe conditions. Self-Relieving Manways operate at pressures below 2.5 pounds per square inch.

mm. **"Subparagraph"** shall mean a portion of a Paragraph of this Consent Decree that is identified by a sequential lower-case letter or by a lower-case Roman numeral.

nn. **"Subsection**" shall mean a portion of a Section of this Consent Decree that has a heading identified by a capital letter.

oo. **"United States"** shall mean the United States of America, acting on behalf of EPA.

pp. "Week" or "weekly" shall mean the standard calendar period, except as otherwise provided in applicable LDAR provisions.

IV. <u>CIVIL PENALTY</u>

10. By no later than thirty (30) days after the Effective Date of this Consent Decree, Solutia and/or INEOS shall pay the sum of \$970,000 as a civil penalty. The civil penalty shall be paid by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to Solutia and INEOS, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the District of Massachusetts, One Courthouse Way, Boston, MA 02210. At the time of payment, Solutia and/or INEOS shall send a copy of the EFT authorization form, the EFT transaction record, and a transmittal letter: (i) to the United States in the manner set forth in Paragraph XII of this Decree (Notices), (ii) by email to <u>acctsreceivable.CINWD@epa.gov</u>; and (iii) by mail to:

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EPA Boston Finance Office 5 Post Office Square Boston, MA 02109

The transmittal letter shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in <u>United States v. Solutia Inc. and INEOS Melamines LLC</u>, and shall reference the civil action number, USAO File Number 2011V00089, and DOJ case number 90-5-2-1-09980.

11. If any portion of the civil penalty due to the United States is not paid when due, Solutia and INEOS shall be jointly and severally liable for interest on the amount past due, accruing from the Date of Lodging through the date of payment, at the rate specified in 28 U.S.C. § 1961. Interest payment under this Paragraph shall be in addition to any stipulated penalty due.

12. Neither Solutia nor INEOS shall deduct any penalties paid under this Decree pursuant to this Section or Section VI (Stipulated Penalties) in calculating its federal income tax.

V. <u>COMPLIANCE REQUIREMENTS</u>

A. <u>Applicability of the Enhanced LDAR Program</u>

13. The Companies shall each separately and independently be responsible for implementing the requirements of this ELP at the Covered Facilities, such that Solutia shall be solely responsible for implementing this ELP at the Solutia Facility, and INEOS shall be solely responsible for implementing this ELP at the INEOS Facility. Where requirements apply across both Covered Facilities, Solutia shall be responsible for implementing those requirements at the Solutia Facility and INEOS shall separately be responsible for implementing those requirements at the Solutia Facility and INEOS shall separately be responsible for implementing those requirements at the Solutia Facility. Nothing in this ELP should be construed as requiring that Solutia complete or report on activities that address or arise from Covered Equipment at the INEOS

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Facility, or as requiring that INEOS complete or report on activities that address or arise from Covered Equipment at the Solutia Facility.

14. Nothing in this ELP should be construed as prohibiting the Companies from coordinating with each other with respect to implementation of the requirements of this ELP, and where the ELP requires the development of written documentation or the submission of reports, the Companies shall have the option of jointly developing a single document or report addressing the Covered Facilities or each developing a separate document addressing its own respective Covered Facility. Submission of any joint document or report shall not affect the separate and independent responsibility of the Companies to implement the requirements of this ELP at their respective Facilities.

15. The requirements of this ELP shall apply to all Covered Equipment. The requirements of this ELP are in addition to, and not in lieu of, the requirements of any other LDAR regulation that may be applicable to a piece of Covered Equipment. If there is a conflict between a federal or state LDAR requirement and this ELP, the Companies shall follow the more stringent of the requirements. Any LDAR requirements imposed exclusively pursuant to this ELP, and not under any federal or state leak detection and repair program, are enforceable only through the provisions of the Consent Decree.

B. Written, Facility-Wide LDAR Program Procedures

16. By no later than three (3) months following the Effective Date, each Company shall develop a written document, or modify its current written LDAR program, that describes:

a. the LDAR program for the Covered Equipment at the Covered Facility (*e.g.*, applicability of regulations to process units and/or specific equipment, leak definitions, leak identification and tracking procedures, monitoring frequencies);

b. a tracking program (*i.e.*, management of change process) that ensures new pieces of Covered Equipment added to the Covered Facility are integrated into its LDAR program and that pieces of Covered Equipment taken out of service at the Covered Facility are removed from the LDAR program;

c. the roles and responsibilities of all employee and contractor personnel assigned to LDAR functions at the Covered Facility;

d. how the number of personnel dedicated to LDAR functions at the Covered Facility is sufficient to satisfy the requirements of its LDAR program; and

e. how the Company plans to implement this ELP.

17. The Companies shall review this document annually and update it as needed by no later than December 31 of each year.

C. Leak Monitoring and Repair

18. <u>Leak Definitions</u>. Beginning no later than six (6) months after the Effective Date,

the Companies shall use the following instrument readings to define a leak under their LDAR programs for all Covered Equipment, unless otherwise indicated herein or unless a more stringent leak definition is required by permit, or by federal or state law or regulation:

Equipment Type	Leak Definition
Valves	250 ppm
Self-Relieving Manways	5,000 ppm*
	*For purposes of clarifying the intent of the immediately prior sentence in Paragraph 18, this leak definition applies only to Self-Relieving Manways that are not subject, pursuant to any federal or state LDAR program or requirement, to any leak threshold below 10,000 ppm.
Connectors	250 ppm
Pumps	500 ppm
Agitators	1000 ppm
OELCDs	250 ppm

Table 1: Leak Definition by Equipment Type	Table 1: 1	Leak De	efinition b	y Equi	ipment T	vpe
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a. For regulatory reporting purposes (*i.e.*, reports to federal or state agencies not required only by this Consent Decree), the Companies may report leak rates against the applicable regulatory leak definitions or may use the lower leak definitions specified in this Subsection V.C. The Companies shall identify in the applicable report the leak definitions being used. Once reference leak rates are selected by each Company, that Company may change the reference leak rates for purposes of such reporting only once every twenty-four (24) months.

b. For purposes of the leak definitions in this Subsection V.C, the Companies may elect to adjust or not to adjust the monitoring instrument readings for background pursuant to any provisions of the applicable LDAR regulations that address background adjustment, in accordance with such regulatory provisions.

c. For Self-Relieving Manways, by no later than three (3) months following the Effective Date, the Companies shall determine which of the following compliance alternatives will be used at the Covered Facilities, and shall include the alternative chosen in their Written, Facility-Wide LDAR Program Procedures described in Subsection V.B:

- Option A: Use EPA Method 21 with a leak definition as set forth in this Section; or
- Option B: Use the EPA Alternative Work Practice to Detect Leaks from Equipment, as per 73 Fed. Reg. 78199 (December 22, 2008), as amended (the "EPA AWP"). This EPA AWP cannot be used for FSE.

Notwithstanding the foregoing, for Self-Relieving Manways at the Covered Facilities, each Company shall monitor the affected equipment at least once initially using Method 21. After initial monitoring using Method 21, the compliance alternative chosen and reported upon

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(Option A or B, above) shall be used for subsequent monitoring, although either Company may choose to switch alternatives annually, provided the Company reports such switch to EPA in the next ELP report due following the date of the switch.

d. For any suspected leaks from Covered Equipment that are detected by sensory means (visual, audible, olfactory) outside of a regularly scheduled monitoring event, the Companies shall either:

- i. for detections based solely on olfactory evidence, use regular maintenance and/or repair procedures by the end of the next business day following the detection to address such suspected leak; promptly document the detection and response in writing (in which case the event need not be classified as a leak under this ELP); and include any Covered Equipment involved and suspected of leaking in the next regularly scheduled monitoring event under Subsection V.D; or
- ii. treat such suspected leak to be a leak meeting or exceeding the applicable numeric threshold, unless Method 21 monitoring of the suspect Covered Equipment documents an instrument reading below such numeric threshold and is conducted by the end of the next business day following the detection.

e. The Companies shall record each instance of a leak and associated repair into the LDAR program, whether or not a leak is detected during a scheduled LDAR monitoring event, along with all Covered Equipment involved in a leak detected by any method, whether under this ELP or any state or federal law or regulation. Furthermore, the Companies shall include such leaks in their calculation of a leak rate and their establishment of a monitoring

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frequency. Repairs of Covered Equipment regulated under any federal or state LDAR program, including repairs of leaks identified pursuant to Paragraph V.C.18.d above, are subject to, and may be managed in accordance with, applicable Delay of Repair provisions.

D. <u>Monitoring Frequency and Equipment</u>

19. <u>Monitoring Frequency</u>. Beginning no later than six (6) months after the Effective Date, except as provided in Subparagraph V.D.19.f below, the Companies shall use the following periodic monitoring frequencies for all Covered Equipment, unless (i) more frequent monitoring is required by permit or by federal or state law or regulation, or (ii) the relevant Covered Process Unit has been permanently shut down:

- a. Valves: Quarterly.
- b. *Connectors:*
 - i. A&P MACT Connectors: Annually.
 - ii. All other connectors: Sensory monitoring using visual, audible, and/or olfactory methods shall be conducted semi-annually. If sensory monitoring reveals evidence of a leak, the suspect component shall be monitored by the end of the next business day following the detection using Method 21 and, if a leak is confirmed, shall be repaired under the applicable schedule for repair. In addition, a random sampling of 100 flanges as well as 500 connectors in each Covered Process Unit (or all flanges and/or connectors if there are fewer than 100 flanges and/or 500 connectors in a Covered Process Unit) shall be monitored annually using Method 21. Information sufficient to identify the connectors monitored using Method 21 under this Subparagraph –

including at a minimum their location, service type, and monitoring results – shall be recorded and maintained in accordance with the requirements of Paragraph V.D.24. Except for the connectors monitored using Method 21 under this Subparagraph, nothing in this ELP shall be construed as requiring the specific identification of, or listing of identification numbers for, connectors where such identification or listing is not otherwise required under an applicable permit or federal or state law or regulation.

c. Self-Relieving Manways: Monthly.

d. *Pumps/Agitators:* Monthly, except that monitoring shall not be required for pumps and agitators that are seal-less or that are equipped with a dual mechanical seal system that complies with the requirements of 40 C.F.R. §§ 63.163(e), 63.1026(e), or 63.1028(e), whichever is applicable.

e. *OELCDs:* Quarterly (monitoring will be done at the closure device; if the closure device is a valve, monitoring will be done in the same manner as any other valve, but also shall include monitoring at the end of the valve or line that is open to the atmosphere).

f. Compliance with the monitoring frequencies in Subparagraphs V.D.19.a through V.D.19.e 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 "inaccessible," "unsafe to monitor," or "difficult to monitor"), so long as the Companies satisfy the applicable conditions and requirements for the exclusion or exemption. In the case of OELCDs which do not have applicable "unsafe to monitor" provisions, the Companies may follow the "unsafe to monitor," "inaccessible," "ceramic," or "ceramic-lined" provisions for connectors found in 40 C.F.R. Part 63, Subpart UU, for such OELCDs.

20. For valves and connectors that have been replaced, repacked, or improved pursuant to Subsection V.G, each.Company may elect to monitor any or all such equipment at the most stringent frequency required by any LDAR regulation applicable to that piece of equipment, rather than at the frequency specified in Paragraph V.D.19. If any such piece of equipment is found to have a Screening Value above the leak definitions in Table 1 of Paragraph C.18, the Company shall monitor that piece of equipment monthly until the piece of equipment shows no leaks at the leak definition levels in Table 1 of Paragraph C.18 for twelve (12) consecutive months. At that time, the Company may commence monitoring at the frequency for that type of equipment set forth in either Paragraph 19 above or Paragraph 21 below.

21. <u>Alternative Monitoring</u>. At any time after twenty-four (24) months have passed after commencing monitoring of valves, connectors, and OELCDs pursuant to the requirements of Paragraph 19, the Companies may elect to comply with the alternative monitoring requirements of this paragraph by notifying EPA no later than three (3) months prior to changing the monitoring frequency as specified in this paragraph. Each Company may elect to comply with these alternative monitoring requirements for a minimum grouping of all pieces of Covered Equipment of the same type (*e.g.*, all valves, all connectors, all OELCDs) in any one Covered Process Unit. An election to comply with the monitoring requirements of this paragraph must include the following:

a. For individual valves and OELCDs that have not leaked (using the leak definitions provided in Table 1 of Paragraph C.18) at any time for at least the twenty-four (24) months prior to electing this alternative, such valves and OELCDs shall be monitored at least annually, unless more frequent monitoring is required by permit or by federal or state law or

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regulation. If any leaks of such equipment are detected while this alternative monitoring schedule is being implemented, including during an LDAR audit conducted under this ELP or during a federal or state audit or inspection, such leaking components will immediately be placed on a monitoring schedule pursuant to the requirements of Subparagraph V.D.21.c.

b. For individual A&P MACT Connectors that have not leaked (using the leak definitions provided in Table 1 of Paragraph C.18) at any time for at least the twenty-four (24) months prior to electing this alternative, such connectors shall be monitored at least biennially (every two years), unless more frequent monitoring is required by permit or by federal or state law or regulation. If any leaks of such equipment are detected while this alternative monitoring schedule is being implemented, including during an LDAR audit conducted under this ELP or during a federal or state audit or inspection, such leaking components will immediately be placed on a monitoring schedule pursuant to the requirements of Subparagraph V.D.21.c.

c. For any individual valve, A&P MACT Connector, or OELCD that has leaked (using the leak definitions provided in Table 1 of Paragraph C.18) at any time in the prior twenty-four (24) months of monitoring, such piece of equipment shall be monitored monthly until the specific piece of equipment shows no leaks (as defined in Table 1 of Paragraph C.18) for a period of twelve (12) months, at which time such equipment may be placed on a monitoring schedule pursuant to the requirements of Subparagraph V.D.21.a or V.D.21.b.

22. <u>FSE Monitoring</u>.

a. For reporting purposes, LDAR monitoring results of FSE shall be converted to readings as methane. If a Company changes to another monitoring instrument (such as a different manufacturer or model), then the formaldehyde calibration procedure, including Response Factor (as defined in 40 C.F.R. Part 60 Appendix A-7, Method 21, Section 3.6) analysis, shall be performed on the new instrument.

b. Beginning no later than three (3) months after the Effective Date, each Company shall create and maintain a list of Covered Equipment that is FSE. FSE shall be adequately identified such that Company personnel and LDAR technicians can readily identify FSE to ensure proper monitoring. The FSE list shall be maintained on-site at the Facility and shall be made available for review and inspection by EPA (or Massachusetts DEP) upon request.

23. <u>Monitoring Equipment Other Than FSE</u>. If the equipment contains or contacts a solution that contains at least 5 weight percent or more of a volatile organic compound that can be detected using Method 21, using a flame ionization detector ("FID") calibrated with methane, then the FID calibrated with methane shall be used for Method 21 LDAR monitoring.

24. Beginning no later than three (3) months after the Effective Date, for all Covered Equipment, Method 21 shall be used in performing LDAR monitoring, using an instrument attached to a data logger (or an equivalent instrument) which directly electronically records the Screening Value detected at each piece of equipment, the date and time that each Screening Value is taken, the identification numbers of the monitoring instrument, and the technician. The Companies may use paper logs only when necessary or more feasible (*e.g.*, when data loggers are unavailable or malfunction, or for small rounds) and shall record, at a minimum, the identity of the technician, the date, the monitoring starting and ending times, all monitoring readings, and the identification numbers of the monitoring equipment. Any and all information recorded on paper logs shall be added to the LDAR database within five (5) business days after the monitoring date. The monitoring data shall be transferred to an electronic database at least weekly for recordkeeping purposes. If, during monitoring in the field, a piece of Covered Equipment is discovered that is not listed in the data logger, it shall be monitored and its data

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recorded by any means available, including the Screening Value, the date and time of the Screening Value, and the identification number of the technician. In such an instance, the failure to initially record the information electronically in the data logger does not constitute a violation of this Paragraph's requirement to record the required information electronically, provided that the piece of Covered Equipment and the information regarding the monitoring event is promptly added to the LDAR database within five (5) business days after the date of discovery.

E. <u>Repairs</u>

25. The requirements in this Subsection V.E shall commence no later than six (6) months after the Effective Date of this Consent Decree.

26. <u>First and Final Attempts at Repair</u>. Except as provided in Subsection V.G, by no later than five (5) days after detecting a leak from Covered Equipment (as defined in Table 1 of Paragraph C.18), a first attempt at repair shall be made. By no later than fifteen (15) days after detection, a final attempt at repair shall be made, or the piece of equipment shall be placed on the DOR list in accordance with the requirements of applicable regulations and the provisions of Subsections V.E and V.F.

27. Except as provided in Subsection V.G, Repair Verification Monitoring shall be performed for all LDAR Covered Equipment repairs.

28. <u>Repair Attempt for Valves (Other Than Control Valves) with Screening Values</u> <u>Greater Than or Equal to 100 ppm but Less Than 250 ppm</u>. For any valve, excluding Control Valves, that has a Screening Value of at least 100 ppm but less than 250 ppm, the valve will not be considered to have a leak as defined in this Consent Decree, but an initial attempt to repair the valve to below 100 ppm shall be made by no later than seven (7) days after the detection of such Screening Value. Repair Verification Monitoring shall be performed to determine if the repair

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has been successful. If, upon Repair Verification Monitoring, the Screening Value is less than 250 ppm, no further action shall be required for that monitoring event for that valve. If, upon Repair Verification Monitoring, the Screening Value is at or above 250 ppm, the requirements for repair under the Consent Decree and this ELP shall be implemented, with all deadlines for such requirements based on the date of the failed Repair Verification Monitoring.

29. Drill-and-Tap for Valves (Other than Control Valves). By no later than six (6) months after the Effective Date, for valves on Covered Equipment (other than Control Valves) that are found to be leaking above 500 ppm, when other repair attempts have failed to reduce emissions below the applicable leak definition and the Companies are not able to remove the leaking valve from service, at least one repair attempt using the drill-and-tap repair method (with a second injection of an appropriate sealing material if the first injection is unsuccessful at repairing the leak) shall be completed prior to placing the leaking valve on the DOR list. Drilland-tap is not required if a valve is repacked or replaced within one month of leak detection, or where the Facility documents a major safety, mechanical, product quality, or environmental issue with repairing the valve using this method. The reason(s) why a drill-and-tap attempt was not performed shall be documented prior to placing the equipment on the DOR list. Drill-and-tap shall be completed within the fifteen (15)-day repair period. Notwithstanding the foregoing, if a drill-and-tap attempt is required but cannot reasonably be completed within the fifteen (15)-day repair period (e.g., if a contractor is not local and must mobilize to the facility), the valve may be provisionally placed on the DOR list and the drill-and-tap repair must be attempted as expeditiously as practical. If the drill-and-tap repair is successful, the valve will be removed from the provisional DOR list. In no event shall the time between the initial monitoring event and the attempt of a drill-and-tap repair take more than thirty (30) days.

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30. <u>Repair Recordkeeping</u>. For each leak (as defined in Table 1 of Paragraph C.18) identified from Covered Equipment at any time, the Companies shall record the following information: the dates of all repair attempts; the repair methods used during each attempt; the date, time and Screening Values for all re-monitoring events; and any information required under Paragraph F.32 for Covered Equipment placed on the DOR list.

31. Nothing in this Subsection V.E is intended to prevent the Companies from taking a leaking piece of Covered Equipment out of service; provided however, that prior to placing the leaking piece of Covered Equipment back in service, the Companies must repair the leak or must comply with the requirements of Subsection V.F (Delay of Repair) to place the piece of Covered Equipment on the DOR list.

F. <u>Delay of Repair</u>

32. <u>Delay of Repair.</u> Beginning no later than the Effective Date, for all Covered Equipment placed on the DOR list, each Company shall:

a. Require sign-off from the relevant Covered Process Unit supervisor or person of similar authority that the piece of Covered Equipment is technically infeasible to repair without a process unit shutdown; and

b. Undertake periodic monitoring at the frequency required for other pieces of Covered Equipment of that type in the Covered Process Unit; and

c. Repair the piece of Covered Equipment within the timeframe required by the applicable LDAR regulation; or, if applicable, replace, repack or improve the piece of Covered Equipment by the timeframes set forth in Subsection V.G.

G. Equipment Replacement/Improvement

33. <u>Valve and Connector Replacement and Improvement Program</u>. Commencing no later than six (6) months after the Effective Date, each Company shall implement the program set forth in this Subsection V.G to replace and/or improve the emissions performance of valves and connectors that are Covered Equipment in each Covered Process Unit at the Covered Facilities.

34. Valves in Covered Process Units

a. <u>List of All Valves in the Covered Process Units</u>. The first compliance reports required to be submitted by each Company under Subsection V.N shall include a list of the tag numbers of all valves that are Covered Equipment, broken down by Covered Process Unit, that are in existence as of the Effective Date. The valves on this list shall be the "Existing Valves" for purposes of this Paragraph 34.

b. <u>Proactive Initial Valve Tightening Work Practices Relating to Each New</u> <u>Valve that Is Installed and Each Existing Valve that Is Repacked</u>. The Companies shall undertake the following work practices with respect to each new valve that is subject to LDAR which is installed and each Existing Valve that is repacked: Upon installation (or re-installation in the case of repacking), the valve's packing gland nuts or their equivalent (*e.g.*, pushers) shall be tightened 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. This practice shall be implemented prior to the valve's exposure (or re-exposure, in the case of repacking) to process fluids.

c. <u>Replacing or Repacking Existing Valves that Leak.</u> Commencing no later than six (6) months after the Effective Date, each Existing Valve in each Covered Process Unit that has a Screening Value at or above 250 ppm, shall be replaced or repacked with a Low-

Emission Valve or with Low-Emission Packing Technology. In the event that a Low-Emission Valve or Low-Emission Packing Technology is commercially unavailable (in consideration of the relevant factors set forth in Appendix A attached hereto) for the service and operating conditions of the valve, the Existing Valve shall be replaced with the best performing valve (i.e., the least likely to leak) commercially available for the service and operating conditions of the valve. Replacement or repacking of Existing Valves pursuant to this paragraph shall be undertaken by no later than thirty (30) days after the monitoring event that triggers the replacement or repacking requirement, unless the replacement or repacking requires a partial or full process unit shutdown. If the replacement or repacking requires a partial or full process unit shutdown, the replacement or upgrade shall be undertaken during the first Maintenance Shutdown that follows the monitoring event which triggers the requirement to replace or repack the valve, unless the Company documents that insufficient time existed between the monitoring event and that Maintenance Shutdown to enable the Company to purchase and install the required valve or valve packing technology. In such case, the Company shall undertake the replacing or repacking at the next Maintenance Shutdown that occurs after the Company's receipt of the valve or valve packing, including all necessary associated materials. If a Company completes the replacement or repacking within thirty (30) days of detecting the leak, it shall not be required to comply with Subsection V.E above of this ELP. If a Company does not complete the replacement or repacking within thirty (30) days, or if, at the time of the leak detection, the Company reasonably can anticipate that it might not be able to complete the replacement or repacking within thirty (30) days, the Company shall comply with all applicable requirements of Subsection V.E.

d. <u>Provisions Related to New Valves That Leak</u>. If, during monitoring after

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installation, a Low-Emission Valve or a valve with Low-Emission Packing Technology has a Screening Value at or above 250 ppm, then: the leak is not a violation of this Decree; it does not invalidate the low-emission status or use of that type of valve or packing technology; and it does not require replacing other, non-leaking valves or packing technology of the same type. The repair provisions of Paragraph E above shall apply to any such leaking valve, and such valves with a screening value at or above 250 ppm but below 500 ppm shall not be required to be replaced or repacked. On any occasion when a Low-Emission Valve or a valve that uses Low-Emission Packing has a Screening Value at or above 500 ppm, the valve shall be replaced or repacked pursuant to the requirements of Subparagraph V.G.34.c.

35. Connectors in Covered Process Units

a. <u>Connector Replacement and Improvement Descriptions</u>. For purposes of this Paragraph 35, for each of the following types of connectors, the following types of replacement or improvement shall apply:

Connector Type	Replacement or Improvement Description
Flanged	Gasket replacement or improvement
Threaded	Replacement of the connector with a like-kind connector
Compression	Replacement of the connector with a like-kind connector
CamLock	Replacement or improvement of the gasket or replacement and improvement of the CamLock
Quick Connect	Replacement or improvement of the gasket, if applicable, or replacement of the connector if there is no gasket
Any type (including any of the above)	Eliminate, at Company's sole discretion (<i>e.g.</i> , through welding, pipe replacement, etc.)

In cases where like-kind replacement is used as the method for replacing or improving a connector (*e.g.*, a Quick Connect replaces another Quick Connect), the following shall apply: If

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there are models or styles of a like-kind connector that a Company identifies, in the exercise of due diligence, as less likely to leak than the existing connector, and one or more of those 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 major safety, mechanical, product quality, regulatory or other issue, a like-kind connector from among such models or styles shall be selected. If there are not types, models, or styles of a like-kind connector that are less likely to leak than the existing connector, or it is not technically feasible to use the like-kind connector that is less likely to leak, then a like-kind connector that is the same model or style as the existing connector may be installed.

b. <u>Installing New Connectors</u>. When selecting a new connector that will be regulated under LDAR after installation, a Company shall, in the exercise of good engineering judgment, select new connectors to be installed in each Covered Process Unit that are the least likely to leak and which are commercially available for the service and operating conditions, and type of piping or tubing that the connectors are in.

c. <u>Replacing or Improving Connectors</u>. Each connector in each Covered Process Unit that, for two (2) out of three (3) consecutive monitoring periods, has a Screening Value at or above 250 ppm, shall be replaced or improved in accordance with the applicable replacement or improvement described in Subparagraph V.G.35.a. Such replacement or improvement shall be undertaken within thirty (30) days after the monitoring event that triggers the replacement or improvement, except where the replacement or improvement requires a partial or full process unit shutdown. If the replacement or improvement requires a partial or full process unit shutdown, the replacement or improvement shall be undertaken during the first Maintenance Shutdown for the process unit that follows the monitoring event which triggers the

requirement to replace or improve the connector, unless the Company documents that insufficient time existed between the monitoring event and that Maintenance Shutdown to enable the Company to install the replacement or improvement. In such case, the Company shall undertake the replacement or improvement at the next Maintenance Shutdown that occurs after the Company's receipt of the necessary materials. If a Company completes the replacement or improvement within thirty (30) days of detecting the leak, it shall not be required to comply with Subsection V.E of this ELP. If a Company does not complete the replacement or improvement within such thirty (30)-day period, or if, at the time of the leak detection, the Company reasonably can anticipate that it might not be able to complete the replacement or improvement within thirty (30) days, it shall comply with all applicable requirements of Subsection V.E.

36. <u>Records of Low-Emission Valves and Low-Emission Valve Packing Technology</u>. Prior to or as soon as possible after installing any Low-Emission Valves or Low-Emission Packing Technology, each Company shall secure from each manufacturer documentation demonstrating that the proposed valve or packing technology meets the definition of Low-Emission Valve and/or Low-Emission Packing Technology. The Companies shall make such documentation available to EPA (or the Massachusetts DEP) upon request.

37. Nothing in this Subsection V.G requires either Company to use any valve, valve packing technology, or connector that is not appropriate for its intended use in a Covered Process Unit.

H. Management of Change

38. <u>Management of Change</u>. To the extent not already done, beginning no later than three (3) months after the Effective Date of this Consent Decree, the Companies shall ensure that each valve, connector, pump, agitator, and OEL added to the Covered Process Units for any

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reason is evaluated to determine if it is subject to LDAR requirements. The Companies also shall ensure that each valve, connector, pump, agitator, and OEL that was subject to the LDAR program is eliminated from the LDAR program if it is physically removed from a Covered Process Unit. This evaluation shall be a part of the Management of Change protocol, consistent with Paragraph V.B.16 above.

I. <u>Training</u>

39. By no later than six (6) months after the Effective Date, each Company shall have ensured that all LDAR Personnel have completed training on all aspects of LDAR that are relevant to the person's duties. This training shall include, at least for LDAR Personnel whose responsibilities involve Formaldehyde-Service Equipment, identification of FSE and how LDAR monitoring is implemented on FSE. By that same time, a training protocol shall have been developed to ensure that refresher training is performed once per calendar year and that new LDAR Personnel are trained prior to any substantive involvement in the LDAR program. Refresher training is not required for any individual whose employment no longer involves relevant LDAR duties. Beginning no later than six (6) months after the Effective Date of this Consent Decree continuing until its termination, each Company shall ensure (or as applicable, require its contractor to ensure for the contractor's employees) that new LDAR Personnel are sufficiently trained prior to any field involvement (other than supervised involvement for purposes of training) in the LDAR program.

J. <u>Quality Assurance ("QA")/Quality Control ("QC")</u>

40. <u>Daily Certification by Monitoring Technicians</u>. Commencing no later than three (3) months after the Effective Date, on each day that LDAR monitoring occurs, at the conclusion of such monitoring, each Company shall ensure that its monitoring technicians certify that the
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data collected on that day accurately represents the monitoring performed for that day by requiring the relevant monitoring technicians to sign a form that includes the following certification:

On [insert 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 that I performed today.

In lieu of a form for each technician for each day of monitoring, a log sheet may be created that includes the certification that the technician dates and signs each day that s/he collects data.

41. <u>Quarterly LDAR Reviews</u>. Commencing by no later than the first full Quarter after the Effective Date, during each calendar quarter, at unannounced times, an LDAR-trained employee of each Company (or a contractor) who does not routinely serve as an LDAR monitoring technician shall undertake the following review of the Company's LDAR program:

a. verify that Covered Equipment was monitored at the appropriate

frequency;

b. verify that proper documentation and sign-offs have been recorded for all Covered Equipment placed on the DOR list;

c. review the difficult-to-monitor, unsafe-to-monitor, and inaccessible equipment lists for each Covered Process Unit to verify that the equipment included on these lists meet the criteria set forth in 40 C.F.R. § 63.1022(c), 40 C.F.R. § 63.1027(e), and/or Subparagraph D.19.f of this ELP;

d. verify that repairs have been performed within the required periods;

e. review monitoring data and Covered Equipment counts (*e.g.*, number of pieces of Covered Equipment monitored per day) for feasibility and unusual trends;

f. verify that proper calibration records and monitoring instrument

maintenance information are maintained;

- g. verify that other LDAR program records are maintained as required; and
- h. observe each LDAR monitoring technician in the field to verify that calibration and monitoring are being conducted as required.

Each Company shall correct any LDAR deficiencies detected or observed for the Covered Facility as soon as practicable, and shall maintain a log or other record that records the date when the reviews required by this Paragraph were undertaken.

K. LDAR Audits and Corrective Action

42. <u>LDAR Audits</u>. Each Company shall conduct LDAR audits of its respective portion of the Covered Facilities pursuant to the schedule in this Subsection V.K. To the extent that either Company uses a third party to undertake its routine LDAR monitoring, that Company shall not use the same third party to undertake its LDAR audits under this Subsection V.K.

43. LDAR Audit Schedule. Until termination of this Consent Decree, each Company will conduct an LDAR audit of its respective portions of the Covered Facilities every year for four or five years, in accordance with the following requirements and schedule: The initial LDAR Audit Commencement Date shall be no later than six (6) months after the Effective Date. The initial LDAR audit shall be conducted by an independent third party with experience conducting LDAR audits. Following the initial audit, the Companies must conduct such independent third-party LDAR audits at least every two years, and may conduct internal LDAR audits or third-party audits in the alternate years. To request termination under Paragraph XVI.95 of this Consent Decree after four or five years from the Effective Date, the Companies must have completed no fewer than three independent third-party LDAR audits, one of which is the initial audit and one of which is the final (fourth or fifth) audit. Company personnel may

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accompany the third-party audit team for educational purposes, but may not undertake any responsibility for conducting substantive audit activities. Company personnel may provide requested information to the third-party audit team. If either Company elects to conduct any internal LDAR audit(s), it may use personnel from subsidiaries or affiliates or from centralized offices that do not primarily serve the Covered Facilities. All such personnel shall be familiar with LDAR requirements and this ELP. For each subsequent LDAR audit after the initial audit, the LDAR Audit Completion Date shall occur within the same calendar quarter (of the subsequent year) in which the first LDAR Audit Completion Date occurred.

44. <u>Components of LDAR Audits</u>. Each LDAR audit shall be conducted using generally accepted audit practices and shall include but not be limited to reviewing compliance with all applicable LDAR regulations (including this ELP); observing LDAR monitoring technicians in the field to ensure calibration and monitoring are being conducted as required; reviewing and/or verifying the same items that are required to be reviewed and/or verified in Paragraph V.J.41; reviewing whether any pieces of equipment that are required to be in the LDAR program are not included; and performing the following activities:

a. <u>Calculating a Comparative Monitoring Audit Leak Percentage</u>. Covered Equipment shall be monitored to calculate a leak percentage for each Covered Process Unit required to be monitored under Subparagraph V.K.44.d, broken down by equipment type (*e.g.*, valves, pumps, etc.). The monitoring that takes place during the audit shall be called "comparative monitoring" and the leak percentages derived from the comparative monitoring shall be called the "Comparative Monitoring Audit Leak Percentages." The comparative monitoring shall be conducted by an independent third party or an individual employed by the Company that does not typically have LDAR responsibilities. In undertaking comparative

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monitoring, a Company shall not be required to monitor every component in each Covered Process Unit but shall comply with generally accepted LDAR audit practices in determining the number of components to monitor.

b. <u>Calculating the Historic, Average Leak Percentage from Prior Periodic</u> <u>Monitoring Events</u>. In the first LDAR audit, the Company shall not be required to calculate a Comparative Monitoring Leak Ratio (defined in Subparagraph V.K.44.c). In subsequent LDAR audits for each Covered Process Unit that is audited, the historic, average leak percentage from prior periodic monitoring events, broken down by equipment type (*e.g.*, valves (excluding pressure relief devices), pumps, etc.), shall be calculated. This average shall be called the "Historic Average Leak Percentage." The following number of complete monitoring periods immediately preceding the comparative monitoring audit shall be used for this purpose: valves -4 periods; pumps and agitators - 12 periods; A&P MACT Connectors – 1 period; other connectors - 2 periods; and OELCDs - 4 periods.

c. <u>Calculating the Comparative Monitoring Leak Ratio</u>. For each Covered Process Unit and each type of equipment, the ratio of the Comparative Monitoring Audit Leak Percentage from Subparagraph V.K.44.a to the Historic Average Leak Percentage from Subparagraph V.K.44.b shall be calculated. This ratio shall be called the "Comparative Monitoring Leak Ratio." If the denominator in this calculation is zero, it shall be assumed (for purposes of this calculation but not for any other purpose under this Consent Decree or under applicable laws or regulations) that one leaking piece of equipment was found in the process unit through routine monitoring during the 12-month period before the comparative monitoring. In their first LDAR audits, the Companies shall not be required to undertake comparative monitoring or to calculate a Comparative Monitoring Leak Ratio for OELCDs because of the

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unavailability of historic, average leak percentages.

d. <u>Calculating Leak Rates</u>. During each LDAR audit, leak rates shall be calculated for each Covered Process Unit where comparative monitoring was performed. During each LDAR audit, for the purposes of compliance with Subparagraphs V.K.44.a through V.K.44.c, comparative monitoring shall be conducted for all Covered Process Units at each Facility. The Companies shall monitor Covered Equipment in their respective Facilities at a statistically representative percentage in each Covered Process Unit audited.

e. <u>Separate Facilities</u>. The Comparative Monitoring Audit Leak Percentage, Historic Average Leak Percentage, and Comparative Monitoring Leak Ratio will be calculated separately for the Covered Process Units at the Solutia Facility and the INEOS Facility, to ensure that the LDAR programs at the two Facilities are evaluated as distinct and separate facilities under this ELP.

f. During each LDAR audit, a review of FSE identification, formaldehyde leak detection equipment, and formaldehyde monitoring techniques used at each Facility shall be conducted. The review shall include an evaluation of formaldehyde LDAR monitoring at each Facility as well as consideration of any new applicable EPA guidance that addresses formaldehyde monitoring.

45. <u>When More Frequent Periodic Monitoring Is Required</u>. If a Comparative Monitoring Leak Percentage calculated pursuant to Subparagraph 44.a triggers a more frequent monitoring schedule under any applicable federal or state law or regulation than the frequency listed in Subsection V.D for the equipment type in that Covered Process Unit, the Company whose facility is affected shall monitor the affected type of Covered Equipment in that Covered Process Unit at the greater frequency unless and until less frequent monitoring is again allowed

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under the specific federal or state law or regulation. At no time may either Company monitor Covered Equipment at an interval that is less frequent than those set forth for the specific type of equipment in Subsection V.D.

46. <u>Corrective Action</u>

a. If the results of any of the LDAR audits conducted pursuant to this Consent Decree identify any non-compliance with applicable LDAR requirements in laws or regulations, or any LDAR provisions of this Consent Decree, the Company at whose facility the non-compliance is identified shall implement, as soon as practicable, all steps necessary to correct or otherwise address such deficiency and to prevent, to the extent practicable, a recurrence of the causes of the deficiency ("Corrective Action"). Corrective Actions shall be implemented with the goal of completing each action within three (3) months after the LDAR Audit Completion Date. For any Corrective Actions that are not expected to be completed within three months after the LDAR Audit Completion Date, the Company at whose facility the non-compliance is identified shall develop a written schedule for prompt completion of the Corrective Action(s) and include information about that schedule in the next Compliance Status Report submitted pursuant to Subparagraph VN.49 below. The written schedule for, or implementation of, any Corrective Action shall not exceed twelve (12) months after the LDAR Audit Completion Date.

b. For purposes of Subparagraph V.K.46.a, a combination of a Comparative Monitoring Leak Ratio calculated pursuant to Subparagraph V.K.44.c of 3.0 or higher *and* a Comparative Monitoring Audit Leak Percentage calculated pursuant to Subparagraph 44.a of 0.5% or higher shall be deemed cause for Corrective Action, although the combination of such ratio and percentage, by itself, shall not be construed as indicating non-compliance for purposes of this Consent Decree.

c. Reporting of Corrective Actions shall occur in accordance with the provisions of Subsection V.N.

L. Certificate of Compliance

47. Within 180 days after the Initial LDAR Audit Completion Dates for each of the Covered Facilities, the appropriate Company shall certify to EPA, using the certification language in Paragraph V.N.51, that: (a) its Facility is in compliance with all applicable LDAR regulations and this ELP; (b) it has completed all Corrective Actions arising from that audit, if applicable, or is in the process of completing all required Corrective Actions arising from that audit; and (c) all Covered Equipment at its Facility that is regulated under a federal or state LDAR program and that is required to be identified and included in the Facility's LDAR Program has been identified and included in the Facility's LDAR program, unless the Company has information that prevents such certification, in which case, to the extent that the certification cannot be made, the Company shall specifically identify the reasons that the certification must be qualified or cannot be made.

M. <u>Recordkeeping Requirements</u>

48. Consistent with Section IX of this Consent Decree (Information Collection and Retention), each Company shall keep all records required by this ELP, including copies of each LDAR audit report, to document compliance with the requirements of this ELP for at least one (1) year after termination of this Consent Decree. Upon request by EPA (or Massachusetts DEP), each Company shall make all such documents available to EPA (or Massachusetts DEP) and shall provide, in electronic format if requested, all LDAR monitoring data required to be generated by this ELP.

N. <u>Reporting Requirements</u>

49. <u>Compliance Status Reports</u>. On the dates set forth in Paragraph 50 below, each Company shall submit to EPA, in the manner set forth in Section XII of this Consent Decree (Notices), the following information for each applicable six (6)-month period:

a. The approximate numbers of LDAR Personnel at the Facility who perform substantive LDAR functions, excluding personnel whose functions involve only administrative (non-substantive) LDAR duties;

b. An identification and description of any non-compliance with the requirements of this ELP that was discovered during the reporting period;

c. An identification of any problems encountered in complying with the requirements of this ELP during the reporting period;

d. The actions taken during the reporting period to comply with Subsection
V.G, any commercial unavailability claims that are made for low-emission components pursuant
to Appendix A, and a schedule for any planned future replacements, re-packings, improvements,
or eliminations;

e. A certification that all necessary LDAR training was conducted in accordance with Subsection V.I;

f. Any deviations identified in the QA/QC performed under Subsection V.J above;

g. A summary of the results of LDAR audits performed under Subsection
V.K during the reporting period, including a specific identification of all areas of non compliance that were alleged and any Corrective Actions with completion schedules longer than
three (3) months after the LDAR Audit Completion Date; and

h. The status of all Corrective Actions that were undertaken during the reporting period in response to LDAR audits performed and the QA/QC performed under Subsection V.J.

50. <u>Due Dates</u>. The first compliance status report shall be due thirty-one (31) days after the first full half-year after the Effective Date (*i.e.*, either: (i) January 31 of the year after the Effective Date, if the Effective Date is between January 1 and June 30 of the preceding year; or (ii) July 31 of the year after the Effective Date, if the Effective Date is between July 1 and December 31). The initial report shall cover the period between the Effective Date and the first full half-year after the Effective Date (a "half-year" runs between January 1 and June 30, and between July 1 and December 31). Until termination of this Consent Decree, each subsequent report will be due on the same date in the following year and shall cover the prior two half-years (*i.e.*, either January 1 to December 31 or July 1 to June 30).

51. <u>Certifications</u>. Each Compliance Status Report and the certification required in Subsection V.L shall be signed on behalf of the submitting company by the plant manager, a corporate official responsible for environmental management and compliance, or a corporate official responsible for plant engineering management, and shall include the following certification:

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

O. <u>Amendments</u>

52. The provisions of this ELP may be amended in writing by mutual agreement of

Solutia, INEOS, and the EPA without involvement of the Court. Amendments that will affect only one Company may be made by agreement between that Company and the EPA provided that prior written notice is given to the other Company not affected by the amendment.

VI. <u>STIPULATED PENALTIES</u>

53. <u>Failure to Pay Civil Penalty</u>. If the Companies fail to pay any portion of the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, the Companies shall be jointly and severally liable for a stipulated penalty of \$2,500 per day for each day that the payment is late. Late payment of the civil penalty and any accrued stipulated penalties shall be made in accordance with Paragraph 10.

54. <u>Failure to Meet All Other Consent Decree Obligations</u>. Each Company shall be liable for stipulated penalties to the United States for its own violations of this Consent Decree as specified in Table 2 below unless excused under Section VII herein (Force Majeure). In no event will either individual Company be liable for stipulated penalties arising from any violations of this Consent Decree that are committed wholly by the other Company. To the extent the same Consent Decree violation is committed by both Companies, each shall be jointly and severally liable to the United States for up to the applicable total stipulated penalty amount for such violation which total amount shall be imposed only once but, as between the Companies, may be apportioned on the basis of equitable factors.

<u>Table 2</u>

	Violation	Stipulated Penalty		
a.	Failure to timely develop a Facility-Wide	Period of noncompliance	Penalty per day late	
	LDAR Document as required by	1 - 15 days	\$300	
	Paragraph V.B.16 or failure to timely	16 - 30 days	\$400	
	update the Document annually if needed	31+ days	\$500	
	pursuant to Paragraph 16			
b.	Each failure to perform monitoring at the	\$100 per component per missed monitoring event,		
	frequencies set forth in Paragraph 19 or, if	not to exceed \$20,000 per month per Covered		
	applicable, Paragraphs 20, 21, 22 and 23	Process Unit		

	Violation	Stipulated Penalty		
с.	Each non- <i>de minimis</i> failure to comply with Method 21 in performing LDAR monitoring, in violation of Paragraph V.D.22, V.D.23, and 24	Monitoring frequency for the component Every 2 years Annual Semi-annual Quarterly	event per p	<u>rocess unit</u> 000 000 500
		Monthly	\$10,	
d.	For each failure, except for each failure specifically identified in the First LDAR Audit Report, to use a monitoring device that is attached to a data logger and for each failure, except for each failure specifically identified in the First LDAR Audit Report, during each monitoring event, to directly electronically record the Screening Value, date, time, identification number of the monitoring instrument, and the identification of technician, in violation of Paragraph 24	\$100 per failure per piece of equipment monitored (by way of example, a failure to record Screening Value, date, and time for a single piece of equipment shall constitute a single failure for which a stipulated penalty would accrue)		
e.	Each failure, except for each failure specifically identified in the First LDAR Audit Report, to transfer monitoring data to an electronic database on at least a weekly basis, in violation of this requirement in Paragraph 24	\$150 per day for each c	lay that the tran	isfer is late
f.	Each failure to timely perform a first attempt at repair as required by Paragraphs 26, 28, and 29. For purposes of these stipulated penalties, the term "repair" includes the required remonitoring in Paragraphs 28 and 29 after the repair attempt; the stipulated penalties in Subparagraph 57.h do not apply.	\$150 per day for each late day, not to exceed \$1,500 per leak		
g.	Each failure to timely perform a final attempt at repair as required by Paragraph 26. For purposes of these stipulated penalties, the term "repair" includes the required remonitoring in Paragraphs 28 and 29 after the repair attempt; the stipulated penalties in Subparagraph 57.h do not apply.	<u>Equipment type</u> Valves, connectors Pumps, agitators	Penalty per component <u>per day late</u> \$300 \$1,200	Not to <u>exceed</u> \$37,500 \$75,000

	Violation	Stipulated Penalty	
h.	Each failure to timely perform Repair Verification Monitoring as required by Paragraph 28 in circumstances where the	Penalty per component Not to Equipment type per day late exceed	
	first attempt to adjust, or otherwise alter, the piece of equipment to eliminate the leak was made within 5 days and the final attempt to adjust, or otherwise alter, the piece of equipment to eliminate the leak	Valves, connectors \$150 \$18,750 Pumps, agitators \$600 \$50,000	
i.	was made within 15 days Each failure to undertake the drill-and-tap method as required by Paragraph 29	Penalty per Period of component Not to noncompliance per day late exceed	
		$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
j.	Each failure to record the information required by Paragraph 30, except for each failure specifically identified in the First LDAR Audit Report.	\$100 per component per item of missed information	
k.	Each improper placement of a piece of Covered Equipment on the DOR list (<i>e.g.</i> , doing so even though it is feasible to repair the equipment without a process unit shutdown)	Penalty per component per Not to <u>Equipment</u> day on list exceed Valves, connectors \$300 \$25,000 Pumps, agitators \$1,200 \$75,000	
1.	Each failure to comply with the requirement in Subparagraph V.F.32.a that an appropriate supervisor sign off on placing a piece of Covered Equipment on the DOR list, except for each failure specifically identified in the First LDAR Audit Report.	\$250 per piece of Covered Equipment	
m.	Each failure to comply with the requirements of Subparagraph V.F.32.c	Refer to the applicable stipulated penalties in Subparagraphs 57.f	
n.	Each failure to install a Low-Emission Valve or a valve fitted with Low-Emission Packing Technology when required to do so pursuant to Subparagraph V.G.34.c or V.G.34.d	\$15,000 per failure	
0.	Each failure, in violation of Subparagraph V.G.35.b, to timely comply with the requirements relating to replacing or improving a connector for any new connector installation	\$10,000 per failure	
p.	Each failure, in violation of Subparagraph V.G.35.c, to timely comply with the requirements relating to replacing or improving a connector if the replacement or improvement does not require a process unit shutdown	\$250 per day per failure, not to exceed \$10,000 per failure	

	Violation	Stipulated Penalty		
q.	Each failure, in violation of Subparagraph V.G.35.c, to comply with the requirements relating to replacing or improving a connector if the replacement or improvement requires a process unit shutdown	\$10,000 per failure		
r.	Each failure, except for each failure specifically identified in the First LDAR Audit Report, to add a piece of Covered Equipment to the LDAR program when required to do so pursuant to the evaluation required by Paragraph V.H.38 (Management of Change)	\$300 per piece of Covered Equipment (plus an amount, if any, due under Subparagraph 57.b for any missed monitoring event related to a component that should have been added to the LDAR Program but was not)		
S.	Each failure to remove a piece of Covered Equipment from the LDAR program when required to do so pursuant to Paragraph 38, except for each failure specifically identified in the First LDAR Audit Report.	\$150 per failure per piece of Covered Equipment		
t.	Each failure to timely develop a training protocol as required by Paragraph 39	\$50 per day late		
u.	Each failure to perform initial, refresher, or new personnel training as required by Paragraph 39	\$1,000 per person per month late, not to exceed \$20,000 per failure		
v.	Each failure of a monitoring technician to complete the certification required in Paragraph 40, except for each failure specifically identified in the First LDAR Audit Report.	\$100 per failure per technician		
w.	Each failure to perform any of the requirements relating to QA/QC in Paragraph 41, except for each failure specifically identified in the First LDAR Audit Report.	\$1,000 per missed requirement per quarter		
x.	Each failure to conduct an LDAR audit in accordance with the schedule set forth in Paragraph 43	Period of noncompliancePenalty per dayNot to exceed1 - 15 days\$150\$75,000 per audit16 - 30 days\$20031+ days\$250		
у.	For the first, third, and fifth LDAR audits, the failure to comply with the personnel requirements set forth in Paragraph 42 and/or 43	\$20,000 per audit		
	For the second and fourth LDAR audits, the failure to comply with the personnel requirements set forth in Paragraph 42 and/or 43	\$10,000 per audit		

	Violation	Stipulated Penalty		
Z.	For failure to substantially comply with the LDAR audit requirements in Paragraph 44	\$50,000 per audit		
aa.	Each failure to implement a Corrective Action within three months after the LDAR Audit Completion Date or, if applicable, each failure to implement a Corrective Action within the time specified in a written schedule for implementation, as required by Paragraph 46	Period of noncompliance 1 - 15 days 16 - 30 days 31+ days	Penalty per day of violation \$250 \$500 \$750	Not to <u>exceed</u> \$50,000 per audit
bb.	Each failure to timely submit a Certificate of Compliance that substantially conforms to the requirements of Paragraph 47	Period of noncompliance 1 - 15 days 16 - 30 days 31+ days	Penalty per day per violation \$100 \$250 \$500	Not to <u>exceed</u> \$50,000 per violation
cc.	Each failure to substantially comply with any recordkeeping, submission, or reporting requirement in Section V not specifically identified above in this Table 2.	Period of noncompliance 1 - 15 days 16 - 30 days 31+ days	<u>of vic</u> \$1 \$2	per day <u>lation</u> 00 50 50

55. <u>Waiver of Payment</u>. The United States may, in its unreviewable discretion, reduce or waive payment of stipulated penalties otherwise due to it under this Consent Decree.

56. <u>Demand for Stipulated Penalties</u>. A written demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates; the stipulated penalty amount (as can be best estimated) that the United States is demanding for each violation; the Company or Companies from which the United States is demanding the penalty, the calculation method underlying the demand; and the grounds upon which the demand is based. Prior to issuing a written demand to a Company for stipulated penalties, the United States may, in its unreviewable discretion, contact that Company for informal discussion of matters that the United States believes may merit stipulated penalties. If the United States issues a written demand to the companies, it shall provide a copy of the demand to the other Company.

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57. <u>Stipulated Penalties' Accrual</u>. Stipulated penalties will begin to accrue on the day after performance is due or the day a violation occurs, whichever is applicable, and will continue to accrue until performance is satisfactorily completed or the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

58. <u>Stipulated Penalties Payment Due Date</u>. Stipulated penalties shall be paid no later than sixty (60) days after receipt of a written demand by the United States unless either Company invokes the dispute resolution provisions of Section VIII of this Decree (Dispute Resolution).

59. <u>Manner of Payment of Stipulated Penalties</u>. Stipulated penalties owing to the United States of under \$10,000 will be paid by check and made payable to "U.S. Department of Justice," referencing DOJ Number 90-5-2-1-09980 and USAO File Number 2011V00089, and delivered to the Financial Litigation Unit at the U.S. Attorney's Office in the District of Massachusetts, One Courthouse Way, Suite 9200, Boston, MA 02210. Stipulated penalties owing to the United States of \$10,000 or more will be paid in the manner set forth in Section IV of this Consent Decree (Civil Penalty). All transmittal correspondence shall state that the payment is for stipulated penalties, shall identify the violations to which the payment relates, and shall include the same identifying information required by Paragraph 10.

60. <u>Disputes over Stipulated Penalties</u>. By no later than sixty (60) days after receiving a demand for stipulated penalties, the Company to whom the demand has been made may dispute liability for any or all stipulated penalties demanded by invoking the dispute resolution procedures of Section VIII of this Decree. If either Company fails to pay stipulated penalties when due and does not prevail in dispute resolution, that Company shall be liable for interest at the rate specified in 28 U.S.C. § 1961, accruing as of the date payment became due.

61. No amount of the stipulated penalties paid by either Company shall be used to

reduce its federal tax obligations.

62. Subject to the provisions of Section X of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Decree shall be in addition to any other rights, remedies, and/or sanctions available to the United States for a violation of this Consent Decree or applicable law. In addition to injunctive relief and/or stipulated penalties, the United States may elect to seek mitigating emissions reductions equal to or greater than the excess amounts emitted if the violations result in excess emissions. Solutia and INEOS reserve the right to challenge the United States' exercise of this option. Where a violation of this Consent Decree is also a violation of the CAA or the federal or state regulations implementing the CAA, the violating Company shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

VII. FORCE MAJEURE

63. "Force Majeure," for purposes of this Consent Decree, is defined as any event beyond the control of the affected Company, its contractors, or any entity controlled by the Company, which delays the performance of any obligation under this Consent Decree despite the Company's best efforts to fulfill the obligation. The requirement that a Company exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential Force Majeure event and best efforts to address the effects of any such event: (a) as it is occurring; and (b) after it has occurred, to prevent or minimize any resulting delay. With respect to any compliance obligation under this Consent Decree that requires a Company to obtain a federal, state, or local permit or approval, Force Majeure may include a delay in the performance of such obligation resulting from a failure to receive, or a delay in receiving, any permit or approval required to fulfill such obligation.

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64. "Force Majeure" does not include either Company's financial inability to perform any obligation under this Consent Decree. Unanticipated or increased costs or expenses associated with the performance of either Company's obligations under this Consent Decree shall not constitute circumstances beyond the Company's control nor serve as the basis for an extension of time under this Section VII.

65. If any event occurs which causes or is likely to cause a delay or impediment to either Company's performance in complying with any provision of this Consent Decree, that Company shall notify EPA in writing promptly but not later than fourteen (14) business days after the time the Company first knew or should have known by the exercise of due diligence that the event was likely to cause a delay, and a copy of such notice shall be provided to any nonparticipating Company. In the written notice, the Company shall specifically reference this Paragraph 65 of the Consent Decree and shall provide, to the extent such information is available at the time, 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; the Company's rationale for attributing such delay to a Force Majeure event; and a statement as to whether, in the opinion of the Company, such event may cause or contribute to an endangerment to public health, welfare, or the environment. A Company shall be deemed to know of any circumstance of which it, its contractors, or any entity it controls knew or should have known. The written notice required by this Paragraph shall be effective upon its mailing by overnight mail or by certified mail, return receipt requested, to EPA in the manner set forth in Section XII (Notices).

66. Failure by either Company to materially comply with the notice requirements

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specified in Paragraph 65 shall preclude that Company from asserting any claim of Force Majeure with respect to the particular event involved, unless the United States, in its unreviewable discretion, permits the Company to assert a Force Majeure claim with respect to the particular event.

67. The United States will respond in writing to a Company regarding the Company's claim of Force Majeure within forty-five (45) days after receiving the notice required under Paragraph 65. A copy of such response shall be provided to any non-participating Company. After this initial response, the parties may confer.

68. If the United States 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 for such time as is necessary to complete those obligations, and the parties shall stipulate to an extension of the deadline(s) for a period of time equivalent to the delay actually caused by such circumstances, or such other period as may be appropriate in light of the circumstances. 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. However, the Company claiming Force Majeure may request that the time be extended for performance of any other obligation that is affected by the Force Majeure event. The Company will not be liable for stipulated penalties for the period of any delay or impediment to performance for which an extension is granted.

69. If the United States does not agree that the delay or anticipated delay has been or will be caused by a Force Majeure event, or if the parties fail to agree on the length of the delay attributable to the Force Majeure event, the United States so will notify the Company in writing of its final decision.

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70. If the Company claiming Force Majeure elects to invoke the dispute resolution procedures set forth in Section VIII herein, it shall do so no later than forty-five (45) days after receipt of the response of the United States under Paragraph 67 (provided that the Company may invoke dispute resolution at any time prior to the expiration of such 45-day period). In any such proceeding, the Company 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 the Company used its best efforts to avoid and mitigate the effects of the delay, and that the Company materially complied with the requirements of Paragraphs 63 and 65. If the Company carries this burden, the delay at issue shall be deemed not to be a violation by the Company of the affected obligation of this Consent Decree identified to the United States and the Court.

VIII. DISPUTE RESOLUTION

71. 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.

72. <u>Informal Dispute Resolution</u>. The first stage of dispute resolution shall consist of informal negotiations. The dispute shall be considered to have arisen when one Party sends the other Party(ies) a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed sixty (60) days after the Notice of Dispute, unless that period is modified by written agreement. If the Parties involved in the dispute cannot resolve it by informal negotiations, then the position advanced by the United States shall be considered binding unless, within forty-five (45) days after the conclusion of the

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informal negotiation period, a Company involved in the dispute invokes formal dispute resolution procedures set forth below.

73. Formal Dispute Resolution. A Company invoking formal dispute resolution procedures shall do so by serving on the United States, within the time period provided in the preceding Paragraph, 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 the Company's position and any supporting documentation relied upon by the Company. The Company and the United States may hold additional discussions, which may, in the unreviewable discretion of each party, include higher level representatives of one or both parties.

74. The United States shall serve its Statement of Position within forty-five (45) days after receiving the Company'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 shall be binding on the Company unless the Company files a motion for judicial review of the dispute in accordance with the following Paragraph.

75. A Company may seek judicial review of an unresolved dispute by filing with the Court and serving on the United States, in accordance with Section XII of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within sixty (60) days after the Company receives the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement describing the Company's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which

the dispute must be resolved for orderly implementation of the Consent Decree.

76. The United States shall respond to the Company's motion seeking judicial review within the time period allowed by the Local Rules of this Court for responses to dispositive motions. The Company may file a reply memorandum to the extent permitted by the Local Rules.

77. In a formal dispute resolution proceeding under this Section, a Company shall bear the burden of demonstrating that its position complies with this Consent Decree and the CAA and that it is entitled to relief under applicable principles of law. The United States reserves the right to argue that its position is reviewable only on the administrative record and must be upheld unless arbitrary and capricious or otherwise not in accordance with law, and the Company reserves the right to argue to the contrary.

78. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of either Company 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. If a Company using the dispute resolution procedures under this Section does not prevail on the disputed issue, stipulated penalties or as otherwise ordered by this Court.

IX. INFORMATION COLLECTION AND RETENTION

79. The United States and its representatives and employees shall have the right of entry into the Facility, 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 documentary evidence, including photographs and similar data, relevant to compliance with the terms of this Consent Decree; and

d. assess the Company's compliance with this Consent Decree.

80. Until one (1) year after termination of this Consent Decree, each Company shall retain, and shall instruct its contractors and agents to preserve, all documents, records, and other information, regardless of storage medium (*e.g.*, paper or electronic), in its or its contractors' or agents' possession or control or that come into its or its contractors' or agents' possession or control or that come into its or its contractors' or agents' possession or control, that directly relate to the Company'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, the United States may request copies of any documents, records, and other information required to be maintained under this Paragraph.

81. Except for emissions data, including Screening Values and any other information or class of information exempted by law or regulation, either Company 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 either Company seeks to protect as CBI, that Company shall follow the procedures set forth in 40 C.F.R. Part 2, where applicable. Except for emissions data, including Screening Values and any other information or class of information exempted by law or regulation, the Companies reserve the right to assert any legal privilege and the United States reserves the right to challenge any claim of privilege.

82. This Consent Decree in no way limits or affects any right of entry and inspection,

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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 the Companies to maintain documents, records, and other information imposed by applicable federal or state laws, regulations, and/or permits.

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

83. This Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action and in the Findings listed in the Notice of Violation and Administrative Order (EPA Docket No. AAA-09-0008) from the date those claims and Findings accrued through the Date of Lodging. For purposes of this Paragraph, the Findings in the Notice of Violation and Administrative Order shall be construed as alleging each violation against both Companies.

84. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 83. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the CAA or its implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 83. The United States further reserves all legal and equitable remedies to address any situation that may present an imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Solutia Facility and/or the INEOS Facility, whether related to the violations addressed in this Consent Decree or otherwise.

85. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, or other appropriate relief relating to the Solutia Facility and/or the INEOS Facility, the subject Company 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 83 above. The Companies reserve any and all rights, claims, and defenses they may have in connection with any allegation, suit, or claim that may be asserted against them by any State or other person or entity.

86. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. The Companies are responsible for achieving and maintaining compliance with all applicable federal, state, and local laws, regulations, and permits, and their compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that either Company's compliance with any aspect of this Consent Decree will result in compliance with provisions of the CAA, or with any other provisions of federal, state, or local laws, regulations, or permits.

87. This Consent Decree does not limit or affect the rights of either Company or of the United States against any third parties, nor does it limit the rights of third parties against either Company or the United States, except as otherwise provided by law. This Consent Decree does not limit or affect the rights of Solutia against INEOS or INEOS against Solutia.

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

XI. <u>COSTS</u>

89. The Parties shall bear their own costs of this action, including attorneys' fees, except that, if the United States incurs costs (including attorneys' fees) in any action necessary to enforce this Consent Decree in which it substantially prevails or to collect any portion of the civil penalty or any stipulated penalties due but not paid by a Company, the United States shall be entitled to collect those costs (including attorneys' fees) against that Company.

XII. <u>NOTICES</u>

90. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed to the persons set forth below. Submission of hard copies is required (double-sided is preferred) and shall be sufficient to comply with the notice requirements of this Consent Decree. Any Party may, by written notice to the other Parties, change its designated notice recipient, address, or means of notice (including the substitution of electronic notice via email instead of notice via mail). The email addresses listed below are to permit the submission of courtesy copies.

Notice or submission to the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, DC 20044-7611 Re: DOJ No. 90-5-2-1-09980

Notice or submission to EPA:

Air Technical Unit EPA Region 1 5 Post Office Square, Suite 100 Mail Code OES 04-2 Boston, MA 02109-3912 Attn: Elizabeth Kudarauskas

and

EPA Region 1 – New England 5 Post Office Square, Suite 100 Mail Code OES 04-3 Boston, MA 02109-3912 Attn: Hugh W. Martinez, Senior Enforcement Counsel

For courtesy purposes only, electronic copy to: <u>martinez.hugh@epamail.epa.gov</u> <u>kudarauskas.beth@epamail.epa.gov</u>

Notice or submission to Solutia:

Cathleen S. Bumb Assistant General Counsel Solutia Inc. 575 Maryville Centre Drive St. Louis, MO 63141

and

David W. Lahr Plant Manager Solutia Inc. 530 Worcester Street Springfield, MA 01151

and

Adam P. Kahn, Esq. Foley Hoag LLP Seaport West 155 Seaport Boulevard Boston, MA 02210 For courtesy purposes only, electronic copies to: <u>csbumb@solutia.com</u> <u>dwlahr@solutia.com</u> akahn@foleyhoag.com

Notice or submission to INEOS:

Scott B. Hansen Operations Director INEOS Melamines LLC 730B Worcester St. Springfield, MA 01151

and

Stephen M. Richmond, Esq. Beveridge & Diamond P.C. 15 Walnut Street Suite 400 Wellesley, MA 02481-2133

For courtesy purposes only, electronic copies to: Scott.Hansen@INEOS.com srichmond@bdlaw.com

Any Party may, by written notice to all other Parties, change its designated notice recipient(s) or notice address(es) provided above. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XIII. <u>EFFECTIVE DATE</u>

91. 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.

XIV. <u>RETENTION OF JURISDICTION</u>

92. The Court shall retain jurisdiction over this case until termination of this Consent Decree for the purposes of resolving disputes arising under this Decree, entering orders modifying this Decree, and effectuating or enforcing compliance with the terms of this Decree.

XV. MODIFICATION

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

94. Any disputes concerning modification of this Decree shall be resolved pursuant to Section VIII of this Decree (Dispute Resolution); provided, however, that instead of the burden of proof as provided by Paragraph 77, 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).

XVI. <u>TERMINATION</u>

95. By no sooner than after each Company's completion of its final LDAR audit required pursuant to Subsection V.K of this Decree, the Companies may send the United States a Joint Request for Termination of this Consent Decree, or any individual Company may send a Request for Termination of its responsibilities under the Consent Decree. In the case of an individual Company request, a copy of the request will be sent to the other Company. In the Request for Termination, the Companies (as applicable) must demonstrate that they have maintained satisfactory compliance with this Consent Decree for the two-year period immediately preceding the Request for Termination. In no event may this Consent Decree be terminated if the civil penalty and/or any outstanding stipulated penalties have not been paid.

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The Request for Termination shall include all necessary supporting documentation.

96. Following receipt by the United States of a Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether the Companies satisfactorily have complied with the requirements for termination. If the United States agrees that the Decree may be terminated or that the responsibilities of an individual Company may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree. In the event that an individual Company's responsibilities are terminated, the remaining Company will be responsible only for implementation of those portions of the Consent Decree that relate to its facility.

97. If the United States does not agree that the Decree may be terminated, either or both Companies may invoke dispute resolution under Section VIII of this Decree. However, neither Company shall invoke dispute resolution for any dispute regarding termination until sixty (60) days after sending its Request for Termination.

XVII. <u>PUBLIC PARTICIPATION</u>

98. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. The Companies consent to entry of this Consent Decree without further notice. However, the Companies shall have no obligations under this Consent Decree in the event the United States withdraws from or withholds approval of this Consent Decree, or declines to move for entry of this Consent Decree, or if the Court declines to enter this Consent Decree.

XVIII. <u>SIGNATORIES/SERVICE</u>

99. Each of the undersigned representatives of Solutia, INEOS, and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice (or her designee) 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.

100. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis.

101. The Companies agree not to oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree unless the United States has notified the Companies in writing that it no longer supports entry of the Decree.

102. The Companies agree 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. The United States agrees that the Companies need not move or plead in response to the Complaint filed in this action unless and until thirty (30) Days after (i) the United States has notified the Companies and the Court in writing that the United States no longer supports entry of this Consent Decree, or (ii) the Court's denial of the United States' motion for entry of this Consent Decree. By agreement of the Parties, operation of the Federal Rules of Civil Procedure, or order of this Court, the time for the Companies' response may be extended beyond such thirty (30) day period.

XIX. <u>INTEGRATION</u>

103. This Consent Decree and its Appendix constitute the final, complete, and exclusive agreement and understanding between the Parties with respect to the settlement embodied herein and supersede all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. No other document, except for any plans or other deliverables that are submitted and approved pursuant to this Decree, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, and no such extrinsic document or statement of any kind shall be used in construing the terms of this Decree.

XX. FINAL JUDGMENT

104. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court in this action as to the United States, Solutia Inc., and INEOS Melamines LLC. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

DATED this day of <u>May</u>, 2013.

Audial C

UNITED STATES DISTRICT JUDGE DISTRICT OF MASSACHUSETTS

We hereby consent to the entry of the Consent Decree in the matter of <u>United States v.</u> <u>Solutia Inc. and INEOS Melamines LLC</u>, subject to public notice and comment.

FOR THE UNITED STATES OF AMERICA

ELLEN N. MAHAN Deputy Chief Environmental Enforcement Section

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EROME W. MACLAUGILIN Trial Attorney Environmental Enforcement Section Environment and Natural Resources Division P.O. Box 7611 Washington, D.C. 20044-7611 (202) 616-7162 (202) 616-2427 (fax) jerry.maclaughlin@usdoj.gov

CARMEN M. ORTIZ United States Attorney District of Massachusetts

By:

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CHRISTINE J. WICHERS Assistant U.S. Attorney John J. Moakley U.S. Courthouse One Courthouse Way, Suite 9200 Boston, MA 02210 (617) 748-3278 christine.wichers@usdoj.gov We hereby consent to the entry of the Consent Decree in the matter of <u>United States v.</u> <u>Solutia Inc. and INEOS Melamines LLC</u>, subject to public notice and comment.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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SUSAN STUDLIEN Director Office of Environmental Stewardship U.S. EPA Region 1 – New England

HUGH W. MARTINEZ Senior Enforcement Counsel Office of Environmental Stewardship U.S. EPA Region 1 – New England 5 Post Office Square, Suite 100 (OES 04-3) Boston, MA 02109-3912 (617) 918-1867 (617) 918-0867 (fax) martinez.hugh@epa.gov

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We hereby consent to the entry of the Consent Decree in the matter of <u>United States v.</u> <u>Solutia Inc. and INEOS Melamines LLC</u>.

FOR SOLUTIA INC.

Eric Nichols Vice President and General Manager, Advanced Interlayers Solutia Inc. 575 Maryville Centre Drive St. Louis, MO 63141 Case 3:12-cv-12377-MAP Document 11 Filed 05/02/13 Page 69 of 69

We hereby consent to the entry of the Consent Decree in the matter of <u>United States v.</u> <u>Solutia Inc. and INEOS Melamines LLC</u>.

FOR INEOS MELAMINES LLC

SCOTT B. HANSEN

SCOTT B. HANSEN Operations Director INEOS Melamines LLC 730B Worcester St. Springfield, MA 01151 Case 3:12-cv-12377-MAP Document 11-1 Filed 05/02/13 Page 1 of 4

APPENDIX A

APPENDIX A

Factors to be Considered and Procedures to be Followed to Claim Commercial Unavailability

This Appendix outlines the factors to be taken into consideration and the procedures to be followed for a Company to assert that a Low-Emission Valve or Low-Emission Packing Technology is "commercially unavailable" pursuant to Paragraph V.G.34 of the Consent Decree.

I. <u>FACTORS</u>

A. Nothing in this Consent Decree or this Appendix requires a Company to use any valve or packing that is not suitable for its intended use in a Covered Process Unit.

B. The following factors are relevant in determining whether a Low-Emission Valve or Low-Emission Packing Technology is commercially available to replace or repack an Existing Valve:

1. Valve type (*e.g.*, ball, gate, butterfly, needle) (this ELP does not require consideration of a different type of valve than the type that is being replaced)

- 2. Nominal valve size (*e.g.*, 2 inches, 4 inches)
- 3. Compatibility of materials of construction with process chemistry
- 4. Valve operating conditions (*e.g.*, temperature, pressure)
- 5. Service life
- 6. Packing friction (*e.g.*, impact on operability of valve)
- 7. Whether or not the valve is part of a packaged system
- 8. Retrofit requirements (*e.g.*, re-piping or space limitations)
- 9. Other relevant considerations

C. The following factors may also be relevant, depending on the process unit or equipment where the valve is located:

10. In cases where the valve is a component of equipment that a Company is licensing or leasing from a third party, valve or valve packing specifications identified by the lessor or licensor of the equipment of which the valve is a component;

11. Valve or valve packing vendor or manufacturer recommendations for the relevant process unit components.

II. <u>PROCEDURES THAT THE COMPANIES SHALL FOLLOW TO ASSERT</u> <u>COMMERCIAL UNAVAILABILITY</u>

A. The Companies shall comply with the following procedures if they seek to assert commercial unavailability under Paragraph V.G.34 of the Consent Decree:

1. The Company must contact a reasonable number of vendors of valves or valve packing that the Company, in good faith, believes may have valves or valve packing suitable for the intended use, taking into account the relevant factors listed in Section I above.

a. For purposes of this Consent Decree, a reasonable number of vendors presumptively shall mean no less than three.

b. If fewer than three vendors are contacted, the determination of whether such fewer number is reasonable shall be based on Factors (10) and (11) above or on a demonstration that fewer than three vendors offer valves or valve packing considering Factors (1) - (9) above.

2. The Company shall obtain a written representation from each vendor, or equivalent documentation, that a particular valve or valve packing is not available as "Low-Emissions" from that vendor for the intended conditions or use.

a. "Equivalent documentation" may include e-mail or other correspondence or data showing that a valve or valve packing suitable for the intended use does not meet the definition of "Low-Emission Valve" or "Low-Emission Packing Technology" in the Consent Decree or that the valve or packing is not suitable for the intended use.

b. If the vendor does not respond or refuses to provide documentation, "equivalent documentation" may consist of records of the Company's attempts to obtain a response from the vendor.

3. Each Compliance Status Report required by Paragraph V.N.49 of the Consent Decree shall identify each valve that the Company otherwise was required to replace or repack, but for which, during the time period covered by the Report, the Company determined that a Low-Emission Valve and/or Low-Emission Packing Technology was not commercially available. The Company shall provide a complete explanation of the basis for its claim of commercial unavailability, including, as an attachment to the Compliance Status Report, all relevant documentation. This report shall be valid for a period of twelve (12) months from the date of the report for the specific valve involved and all other similar valves, taking into account the factors listed in Part I.

III. <u>OPTIONAL EPA REVIEW OF A COMPANY'S ASSERTION OF COMMERCIAL</u> <u>UNAVAILABILITY</u>

A. At its option, EPA may review an assertion by either Company of commercial unavailability. If EPA disagrees with the Company's assertion, EPA shall notify the Company in writing, specifying the Low-Emission Valve or Low-Emission Packing Technology that EPA believes to be commercially available and the basis for its view that such valve or packing is appropriate taking into consideration the Factors described in Part I. After the Company receives EPA's notice, the following shall apply:

1. The Company shall not be required to retrofit the valve or valve packing for which it asserted commercial unavailability (unless the Company is otherwise required to do so pursuant to another provision of the Consent Decree).

2. The Company shall be on notice that EPA will not accept a future assertion of commercial unavailability for: (i) the valve or packing that was the subject of the unavailability assertion; and/or (ii) a valve or packing that is similar to the subject assertion, taking into account the Factors described in Part I.

3. If the Company disagrees with EPA's notification, the Company and EPA shall informally discuss the basis for the claim of commercial unavailability. EPA may thereafter revise its determination, if necessary.

4. If the Company makes a subsequent commercial unavailability claim for the same or similar valve or packing that EPA previously rejected, and the subsequent claim also is rejected by EPA, the Company shall retrofit the valve or packing with the commercially available valve or packing unless the Company is successful under Subsection III.B below.

B. Any disputes under this Appendix first shall be subject to informal discussions between the Company and EPA for a period not to exceed sixty (60) days before the Company shall be required to invoke the Dispute Resolution provisions of Section VIII of the Consent Decree if the Company wishes to invoke Dispute Resolution. Thereafter, if the dispute remains, the Company shall invoke the Dispute Resolution provisions at its election.