

**LETTER OF AGREEMENT TO IMPLEMENT AN
EXPEDITED CORRECTIVE ACTION PROGRAM BETWEEN
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES AND
UNIVAR USA INC.
BERKELEY, MISSOURI
EPA ID#MOD084396985**

I. GENERAL PROVISIONS

A. Purpose

The Missouri Department of Natural Resources (“the department”) and Univar USA Incorporated-St. Louis (Univar-StL) are entering into this Letter of Agreement (LOA) for the purpose of implementing an Expedited Corrective Action Program (ECAP) at Univar-StL. This LOA describes the roles, responsibilities and expectations of each party with respect to the activities conducted hereunder.

B. Definitions

For purposes of this LOA, the following definitions shall apply:

"Area of Concern (AOC)" means any area at the facility where an actual or potential release of hazardous waste or hazardous constituents, which is not from a Solid Waste Management Unit, is occurring and is determined by the department to pose an actual or potential threat to human health or the environment.

"Facility" means all contiguous property under the control of the owner/operator of Univar-StL.

"Hazardous constituent" means any constituent identified in Appendix VIII of 40 CFR Part 261, as incorporated in 10 CSR 25-4.261.

"Hazardous waste" means any waste, or combination of wastes, as defined by or listed in 10 CSR 25-4, which because of its quantity, concentration, physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or which may pose a threat to the health of humans or other living organisms.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

"Solid Waste Management Unit (SWMU)" means any discernible unit at the facility at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

"Stabilization" means actions to control or abate threats to human health and/or the environment from releases at Univar-StL and/or to prevent or minimize the further spread of contamination while long-term remedies are pursued.

All other terms used herein shall have the same meaning as those in 10 CSR 25-3, 10 CSR 25-4, 10 CSR 25-5, 10 CSR 25-7 and Section 260.360, RSMo, unless this LOA specifically provides otherwise. Where terms are not defined in the law, the regulations, this LOA, or the United States Environmental Protection Agency (EPA) guidance or publications, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific meaning of the term.

C. Acknowledgments and Expectations

The department is seeking to simplify and streamline the process through which Univar-StL addresses corrective action requirements to ensure protection of human health and the environment. By entering into this LOA, the department and Univar-StL agree to work in a cooperative and coordinated manner to ensure successful development and implementation of an ECAP at the Berkeley, Missouri, facility and to ensure efficient use of agency and facility resources in addressing corrective action requirements.

The ECAP to be implemented pursuant to this LOA is intended to ensure protection of human health and the environment. The department and Univar-StL believe that timely investigation and/or remediation at the Berkeley, Missouri, facility will be of significant benefit in the protection of human health and the environment. The department and Univar-StL also believe that expedited corrective action may be an effective substitute for corrective action performed pursuant to other formal regulatory mechanisms and may be instrumental in assisting and supporting Univar-StL in investigation, clean-up and/or revitalization of the Berkeley, Missouri, facility.

The department and Univar-StL agree that the elements of this LOA are an integral part of Univar-StL's ECAP and are necessary for the protection of human health and the environment; are responsive to the concerns of the department, Univar-StL, the public, EPA and the regulated community in general; and otherwise meet the corrective action requirements which would be applicable pursuant to a hazardous waste permit or corrective action order.

D. Implementation

Univar-StL agrees to implement an ECAP at the Berkeley, Missouri, facility as described in Section II of this LOA. The ECAP shall be designed to identify releases of hazardous waste and/or hazardous constituents to the environment, investigate the nature and extent of such releases and, if necessary, implement appropriate corrective measures to protect human health and the environment.

The department will review, provide written comments on and approve Univar-StL's ECAP deliverables including, but not limited to, investigation work plans and reports, evaluations of corrective measures alternatives and corrective measures implementation reports. The department will utilize applicable EPA and other appropriate technical guidance within the framework of established federal/state regulations and program-specific administrative policies and procedures in reviewing, commenting on and approving Univar-StL's ECAP deliverables.

Univar-StL agrees to implement ECAP work plans as approved by the department, generally perform work in accordance with the schedule contained in such work plans and document/report substantial deviations from the provisions of approved work plans.

The department will ensure that Univar-StL's ECAP is conducted in an appropriate and timely manner and will ensure that both technical/legal assistance and procedural guidance are available to support and facilitate ECAP activities at Univar-StL. Technical oversight for approved investigation and remediation activities, including field observation, split-sampling, and inspection of final remedies will be provided by the department, as appropriate.

Univar-StL shall comply with all applicable environmental laws and regulations as may be necessary in the implementation of the ECAP pursuant to this LOA. These environmental laws and regulations are administered by the department's Air Pollution Control Program, Hazardous Waste Program, Land Reclamation Program, Solid Waste Management Program, and Water Protection Program. It shall be Univar-StL's responsibility to contact the above-referenced programs and to prepare/submit any permit application(s) and/or procure any permit(s) necessitated by implementation of the ECAP pursuant to this LOA. Examples of potentially applicable permits include State Operating Permits issued by the department's Water Protection Program for facility storm water discharges, treatment/discharge of wastewater and/or contaminated groundwater, land disturbance, and underground injection control to facilitate remediation. Potentially applicable permits also include construction and/or operating permits issued by the department's Air Pollution Control Program for remediation activities that result in regulated air discharges.

The department and Univar-StL will, at a minimum, provide opportunities for meaningful public/community involvement in the ECAP process at the time of final remedy selection, should a final remedy prove necessary at Univar-StL. Univar-StL agrees to be responsible

for providing public notice and an opportunity for comment for any proposed final remedy for a minimum of 30 calendar days. Additional public/community involvement may be necessary for significant interim or stabilization measures and will be addressed on a case-by-case basis. The department agrees to review and approve Univar-StL's public notice correspondence prior to publication and be the recipient of and respond to comments, if any, received during the public comment period.

Upon successful completion of all approved ECAP activities as verified by review of the deliverables submitted pursuant to this LOA, any necessary inspections by the department and/or establishment of any necessary institutional and/or engineering controls, the department will issue a Certification of Completion to Univar-StL acknowledging completion of ECAP activities in accordance with the approved work plan(s).

Following issuance of a Certification of Completion to Univar-StL, the department will provide to EPA copies of all approved ECAP work plans/reports and related correspondence, to the extent that EPA has not already received copies of these documents. The department will also transmit a letter to EPA containing the department's recommendation concerning the need, or lack thereof, for further corrective action at Univar-StL. EPA will review the department's recommendation and administrative record for the facility and, based on all relevant information and data, EPA will respond to specific requests for review of the department's corrective action recommendations in accordance with the Facility Management Plan which is negotiated between the department and EPA.

Univar-StL agrees to record the department's Certification of Completion as part of the chain of title for the property. In the event that contaminated environmental media containing hazardous waste and/or hazardous constituents remain at Univar-StL, a deed notation or restriction, as appropriate, acknowledging this condition shall be recorded as part of the chain of title for the property. As indicated above, this action shall be completed prior to the department's issuance of a Certification of Completion.

Univar-StL agrees to provide a copy of this LOA and the department's Certification of Completion in their entirety to any potential buyer of the facility along with a notice of any ongoing final remedy maintenance and monitoring requirements (e.g., cap inspection/repair, groundwater sampling and analysis, long-term financial assurance obligations, etc.), engineering controls (e.g., access restrictions, posting of signs) and/or institutional controls (e.g., deed notices/restrictions).

E. Review and Approval

Following submission of any ECAP plan or report (excluding any progress reports and uninterpreted analytical or other data), the department will review Univar-StL's plan or report. If the plan or report is determined to be adequate, the department will approve the plan or report in writing. If the plan or report is determined to be inadequate, the department

will notify Univar-StL in writing of the plan's or report's deficiencies and will contact Univar-StL to schedule a meeting or teleconference to informally discuss/resolve the deficiencies and establish a time frame for submittal of a revised plan or report, if necessary.

If the department determines that deficiencies or issues still exist following review of a revised plan or report, which the department believes will preclude approval, the department will contact Univar-StL to facilitate additional discussions and/or meetings to resolve the remaining deficiencies or issues. The department and Univar-StL believe that in the majority of instances, resolution of any remaining deficiencies or issues may be accomplished in an informal manner. Inasmuch as this LOA is a voluntary agreement between the department and Univar-StL, this LOA does not contain provisions for independent, administrative dispute resolution. In the event that the department and Univar-StL are unable to reach a mutually acceptable resolution within a reasonable time frame of any remaining deficiencies or issues in an informal manner, this LOA may be terminated by either party in accordance with Section I.H. below.

F. Protectiveness

All expedited response actions, including stabilization and interim measures activities, shall be protective of human health, welfare, and the environment. These actions shall comply with all applicable federal, state and local laws, regulations and ordinances. The department will, through oversight of Univar-StL's ECAP activities, determine whether releases to the environment at the facility pose a threat to human health or the environment, and whether mitigation of the potential exposure of human and ecological receptors to such releases is warranted, consistent with applicable Federal and State laws and regulations.

If required, remediation shall be consistent with applicable EPA corrective action guidance, the department's corrective action policies and procedures, and applicable federal and state laws and regulations. Final corrective action remedies shall be based on site-specific conditions and may consider projections of future land use(s) at Univar-StL.

G. Modification

The department and Univar-StL may revise this LOA at any time to simplify, clarify and/or modify the specifications contained herein. The department shall keep Univar-StL informed of any proposed modifications of applicable state or federal statutory or regulatory authority that may impact this LOA. Any modification of this LOA shall be mutually agreed to in writing by the department and Univar-StL.

H. Termination of Agreement

Univar-StL may terminate this LOA at any time for any reason by giving written notice, via certified mail, to the department. The department may terminate this LOA at any time for any reason by providing 30 days written notice via certified mail to Univar-StL. Although

the department reserves this LOA termination right, it is acknowledged that such termination would normally be for cause (e.g., failure to implement approved plan(s) or otherwise comply with the terms of this LOA).

I. Site Access and Indemnification

Univar-StL agrees to allow the department access to Univar-StL for purposes of overseeing implementation of ECAP activities including, but not limited to, sampling, conducting investigations related to the extent of contamination, performing remedial action(s), and observing or monitoring the overall progress of the work conducted pursuant to approved ECAP plans.

Univar-StL agrees to hold the department harmless and to indemnify the state of Missouri for any claims including, but not limited to, claims for property damage or personal injury arising from activities of Univar-StL that are reviewed or overseen by the department under this LOA.

J. Reservation of Rights

This LOA, while intended to assist Univar-StL in meeting applicable corrective action requirements, does not contain terms or conditions which eliminate, reduce, or otherwise impair the department's or EPA's existing authority to require corrective action under applicable state and federal law. This will be the case regardless of whether this LOA is prematurely terminated, or the obligations hereunder are successfully discharged.

The nature and scope of Univar-StL's ECAP is based strictly on information available at the time this LOA is executed. If, prior to or following issuance of a Certification of Completion to Univar-StL, the department or EPA become aware of previously unknown conditions or information which indicates that Univar-StL's ECAP activities are not protective of human health and the environment, the department and EPA reserve the right to take response actions or require additional corrective action as necessary to protect human health and the environment.

The department and EPA reserve any and all rights and authority at all times that they respectively have, including but not limited to, legal, equitable or administrative rights, and authority. This specifically includes the department's authority to conduct, direct, oversee and/or require response in connection with Univar-StL's ECAP. Notwithstanding any other provision of this LOA, nothing herein affects or limits the department's or EPA's authority or ability to take any enforcement action required or issue an order by law.

Facility reservation of rights:

Univar-StL, the department and EPA reserve any and all rights and authority at all times that they respectively have, including but not limited to, legal, equitable or administrative rights,

and authority. This specifically includes the department's authority to conduct, direct, oversee and/or require response in connection with Univar-StL's ECAP. Notwithstanding any other provision of this LOA, nothing herein affects or limits the department's or EPA's authority or ability to take any enforcement action required or issue an order by law, or Univar-StL's right or ability to defend against such action or order.

K. Corrective Action Oversight Cost Recovery

The Missouri Hazardous Waste Management Law at 260.375(30), RSMo., provides that owners/operators of hazardous waste facilities performing corrective action pursuant to sections 260.350 to 260.430 RSMo., shall pay to the department all reasonable costs, as determined by the Missouri Hazardous Waste Management Commission, incurred by the department in the oversight of corrective action investigations, monitoring or clean-up of releases of hazardous waste or hazardous constituents at hazardous waste facilities. In general, this oversight includes review of the technical and regulatory aspects of corrective action plans, reports, documents, and associated field activities, including attesting to their accuracy and adequacy.

Corrective action cost recovery billing will be based on the hourly rate(s) of departmental staff performing corrective action oversight multiplied by a fixed factor of three and one-half (3 1/2). This fixed factor is comprised of direct labor; fringe benefits including, but not limited to, insurance, medical coverage, Social Security, Workers' Compensation and retirement; direct overhead, including, but not limited to, clerical support and supervisory review and Hazardous Waste Program administrative and management support; general overhead, including, but not limited to, utilities, janitorial services, building expenses, supplies, expenses and equipment, and department indirect costs; and other support activities, including, but not limited to, training, peer review, tracking and coordination.

The direct costs associated with travel of departmental staff to Univar-StL for the purpose of corrective action oversight including, but not limited to, expenses incurred for lodging, meals, and mileage based on the rates established by the state of Missouri are recoverable at actual cost. Corrective action-related costs associated with public notification and departmental public hearings, including legal notice costs, media broadcast costs, mailing costs, hearing officer costs, court reporter costs, hearing room costs, and security costs, are also recoverable at actual cost.

Univar-StL's total cost for corrective action oversight will depend on the nature, scope, and complexity of corrective action activities and the corresponding level of departmental oversight required. All funds remitted by Univar-StL pursuant to this LOA will be deposited in the hazardous waste fund created in Section 260.391, RSMo.

II. FACILITY-SPECIFIC PROVISIONS

A. Univar-StL Location and Legal Description

Univar-StL is located at 8925 Seeger Industrial Drive, St. Louis, Berkeley, Missouri. Univar-StL encompasses 3.43 acres. A 32,500 square foot office/warehouse building is located along the western edge of the site. The general offices are located in the southeast portion of the building. Univar-StL leases and operates the facility as a chemical distribution center. The location consists of one full lot in this industrial development (“Gemini Industrial Park”) plus 200 feet of the adjacent lot immediately to the east.

The legal description of Univar-StL is as follows: Lot 5 of GEMINI INDUSTRIAL PARK ANNEX, a subdivision in St. Louis County, Missouri, as per plat thereof recorded September 25, 1975, in Plat Book 163 on page 23, of the St. Louis County Records. The West 200 feet of lot 4 of GEMINI INDUSTRIAL PARK- AMENDMENT NO.1, according to the plat thereof recorded in the Book 163 page 23 of the St. Louis County Records. Attachment 1 is a copy of the plat drawing based on the legal description of the Univar-StL property. This property does/does not carry ongoing restrictions as to its use. The northern half of the Univar-StL facility is located in Township 47North, Range 6 East, Section 33, and the southern half of the facility is located in Township 46 North, Range 6 East, section 4. The geographic coordinates are 38°48’ 16” N latitude and 90°20’ 50” W longitude.

B. Univar-StL Regulatory Status

Univar-StL is or was an interim status hazardous waste TSD facility pursuant to applicable federal and state laws and regulations. Univar-StL is subject to corrective action but is not subject to issuance or reissuance of a Missouri Hazardous Waste Management Facility Permit. Certain wastes and the constituents thereof found at Univar-StL are hazardous wastes or hazardous constituents pursuant to 40 CFR Part 261 as incorporated by reference in 10 CSR 25-4.261(1). In addition, there is or has been an actual or potential release of hazardous wastes and/or hazardous constituents into the environment at Univar-StL as indicated by the results of an Environmental Priority Initiative Preliminary Assessment (EPI/PA) report and submitted reports of activities conducted pursuant to the approved interim status closure plan.

C. Ownership and use of Property

Univar-StL operates and conducts business in the state of Missouri. Univar-StL is an active distributor of industrial and chemical solvents. Univar-StL also picks up spent solvents from customers and temporarily stores them at their facility until enough drums (60 to 70) have been accumulated for Hydrocarbon Recycling Incorporated (HRI) to recycle. These wastes are classified as various F, K, and U “listed” hazardous waste as well as ignitable, corrosive, and toxic “characteristic” hazardous wastes.

The site is situated on Seeger Industrial Drive approximately 2.2 miles north of Interstate Highway 70 in Berkeley, Missouri. Univar-StL is the current owner/operator of the facility.

D. Regulatory History and Previous Investigations/Remediation

Univar-StL originally operated a Resource Conservation and Recovery Act interim status hazardous waste storage unit at the site. A Part A RCRA permit application was submitted on November 19, 1980. A complete Part B RCRA permit application was submitted on April 26, 1994. Univar-StL decided not to proceed with RCRA permitting May 31, 1995. A revised interim status closure plan was approved August 21, 1995. “Clean closure” was not achieved at the storage unit despite decontamination activities outlined in the approved closure plan. On September 12, 1996 and February 24, 1998, Univar-StL facility submitted RCRA closure reports that showed Univar-StL did not achieve clean closure performance standards as required by their revised plan. Several solvents and metals were detected in amounts greater than their practical quantitation limits in soil in the vicinity of the former waste container storage unit.

The EPI/PA report requested by EPA and generated by Ecology and Environment, Inc., on August 29, 1991, as supplemented by review of the HWP’s files for the facility and the interim status closure reports indicate that there are several SWMUs and AOCs that require additional research and/or investigation.

E. Scope of Work

A comprehensive listing and description of all SWMUs and AOCs at Univar-StL is as follows per this LOA:

Table 1: Classification of SWMUs According to the EPI/PA and Permit Application

SWMU	Description of SWMU
1	<u>Hazardous Waste Drum Storage Area</u> : The hazardous waste drum storage area contains six 13 feet long by 5 feet wide by 6 inches deep, stainless steel entrapment pans. Fifty-five gallon drums of spent solvent waste are placed inside the pans and sit on top of wooden pallets. Three pans are aligned in a north-south direction, and three pans are aligned in an east-west direction forming an ‘L’ shape. Approximately 60 to 70 drums of solvent waste are shipped to HRI every month or two. A “Lean-to” structure covering the former waste container storage area has been demolished. Asphalt from the area was removed and replaced with concrete. No soil from this area was removed. The area is being used to store containerized products.

2	<p><u>Satellite Accumulation Area (Solvent Repackaging building):</u> A small satellite accumulation area is maintained in the solvent repackaging building. Solvent rinsate generated from the rinsing and refilling of reusable solvent drums are stored in this building. The area has no containment. Storage duration is unknown. Drums are moved to the hazardous waste drum storage area when full. This unit is not RCRA-regulated. The building that houses the satellite accumulation area has been demolished. The concrete of the accumulation area remains in-place. Asphalt adjacent to the area has been removed and replaced with concrete. A new, larger building is being built in the same location. Soil removed from this area (for building foundations) is being contained in roll-offs and is being characterized for proper disposal. Satellite accumulation will resume in the same general location following the completion of the facility improvement project.</p>
3	<p><u>Elementary Neutralization Unit:</u> This SWMU comprises several areas. The effluent generated during the rinsing and refilling of drums in the corrosive repackaging building flows into a drain in the floor. The effluent then flows from the drain through a PVC pipe to a sump, which is located just north of the corrosive repackaging building. The sump is an in-ground unit with a 180-gallon capacity. The inner container is constructed of a 3 1/8-inch thick polyethylene liner; the outer container is concrete. A portable electric pump pumps the effluent from the sump through PVC pipe to the elementary neutralization tank located approximately 20 feet east of the sump. The neutralization tank is situated within the large tank farm and surrounded by concrete-containment diking. The tank is constructed of polyethylene and has a 6,000-gallon capacity. If necessary, the pH of the effluent is adjusted to between 6 and 10 and then released into the sanitary sewer. This unit is not RCRA-regulated, as elementary neutralization units are exempt. The in-ground sump has been disconnected from the neutralization system and filled with sand, gravel, and concrete. The sump remains in-place, but it is now inoperable. The new neutralization system in the same general location and is now entirely aboveground.</p>
4	<p><u>Corrosive Tank Farm Sump:</u> The sump located in the southwest corner of the tank farm has been filled with sand, gravel, and concrete. The sump remains in-place; however, it is now inoperable.</p>

Area Of Concern	Description of AOC
1	<u>Storm Drain</u> : The area located approximately 20 feet west of the Hazardous Waste Drum Storage Area. A release from the waste storage drums could potentially enter the drain, which is topographically downgrading from the drums. Surface Waters is the primary migration pathway for this area of concern. The drain is part of the city storm sewer system. The storm sewers on and near the site empty into a tributary that is located approximately 2000 feet west of the facility. The storm drain has not been modified by the facility improvement project. Asphalt surrounding the drain has been removed and replaced with concrete. No soil was removed from this area.
2	Floor Drain in the Corrosive Repackaging Area: The floor drain has been filled with sand and gravel and capped with concrete. The drain remains in-place; however, it is now inoperable.
3	Corrosive Tank Farm Containment: The containment structures in this area have not been altered by the facility improvement project.
4	Cylinder Wash Station: The cylinder wash station inside the gas repackaging building has not been altered by the facility improvement project.

F. RCRA Facility Investigation

A RCRA Facility Investigation Work Plan is required pursuant to this LOA. This RFI Work Plan shall be designed to: 1) identify any releases of hazardous waste and/or hazardous constituents from the SWMUs and AOCs defined in II.E. above; 2) characterize the nature, vertical and horizontal extent, rate of migration, and any actual or potential receptors of any identified releases; and 3) collect any other pertinent data which may be utilized to substantiate future corrective action investigation and/or remediation decisions.

The content of the RFI Work Plan and resulting RFI Report shall be appropriate for facility-specific conditions and shall be consistent with and address all applicable investigation elements described in the EPA guidance document entitled Interim Final RCRA Facility Investigation Guidance; EPA 530/SW-89-031, May 1989. The RFI Work Plan shall include: 1) a description of current site conditions, 2) all proposed investigation activities and procedures to be conducted at the facility; 3) a schedule for implementing and completing the RFI and submitting a final RFI Report; 4) the qualifications of all personnel, including contractors, performing or directing the investigations and overall management of the RFI; 5) a Quality Assurance Project Plan which specifies, with respect to the RFI objectives, the sampling procedures, analytical methods, field and laboratory quality control samples, chain-of-custody procedures and data review, validation, and reporting procedures which are

designed to achieve the data quality goals of the RFI; and 6) a health and safety plan that assures the RFI activities are conducted in a manner that is protective of human health and the environment.

The RFI Work Plan will be reviewed and approved by the department in accordance with I.E. Univar-StL shall implement the RFI in accordance with the schedule contained in the approved RFI Work Plan.

Due to the complexity of defining the extent of contamination, it may become necessary for Univar-StL to use a phased investigation approach, which may, in turn, necessitate the submittal of a supplemental RFI Work Plan(s) for approval.

During the course of the RFI or other corrective action activities pursuant to this LOA, Univar-StL may discover new SWMUs, AOCs and/or releases from previously-identified SWMUs/AOCs not currently targeted for further corrective action as part of this LOA. The necessity for investigation and/or remediation of any newly-identified SWMUs, AOCs, or release(s) will be evaluated on a case-by-case basis. If any such investigation/remediation proves necessary, Univar-StL is advised that the department will not issue a Certification of Completion to Univar-StL until all necessary work has been completed.

Univar-StL shall submit a RFI Report to the department in accordance with the schedule contained in the approved RFI Work Plan. The RFI Report shall present all information gathered under the approved RFI Work Plan in a form that is consistent with Section 5 of the EPA guidance document entitled Interim Final RCRA Facility Investigation Guidance; EPA 530/SW-89-031, May 1989. The RFI Report shall provide an interpretation of the RFI information gathered, supported with documentation, to enable the department to determine whether further investigation, monitoring, stabilization, a Corrective Measures Study and/or a final remedy are necessary.

The RFI Report shall describe the procedures, methods, and results of all investigations of SWMUs/AOCs and associated releases including, as applicable, the following:

- 1) characterization of the nature, concentration(s), horizontal and vertical extent, and direction/rate of movement of releases from SWMUs/AOCs;
- 2) characterization of the environmental setting of the facility including hydrogeological and climatological/meteorological conditions, soil and bedrock characteristics, surface water and sediment quality, and air quality;
- 3) characterization of SWMUs/AOCs from which releases have been or may be occurring, including unit and waste characteristics;
- 4) descriptions of human and environmental receptors which are, may have been, or, based on site-specific circumstances, could be exposed to release(s) from SWMUs/AOCs;
- 5) information that will assist the department in assessing risks to human health and the environment from releases from SWMUs/AOCs;
- 6) extrapolations of future contaminant movement;
- 7) laboratory, bench-scale, pilot-scale, and/or tests or studies to determine the feasibility or effectiveness of

treatment technologies or other technologies that may be appropriate in implementing remedies; 8) statistical analyses to aid in the interpretation of data; and 9) results of any stabilization measures previously implemented.

The RFI Report will be reviewed and approved by the department in accordance with I.E. If, after review of the RFI Report, the department determines that the objectives of the RFI have not been met, additional investigation may be required. Upon approval of the RFI Report by the department, Univar-StL and the department will meet to discuss and reach agreement concerning the next step in the ECAP process at Univar-StL.

G. Interim/Stabilization Measures

If, during the course of any activities undertaken pursuant to this LOA, Univar-StL or the department determines that a release or potential release of hazardous waste, including hazardous constituents, may pose a short-term threat to human health or the environment, implementation of interim/stabilization measures may be necessary to slow or stop the further spread of contamination until a final remedy can be implemented. In certain situations, implementation of interim measures may be desirable even though stabilization does not appear to be necessary based on short-term threats posed by an actual or potential release. The necessity for and/or desirability of interim/stabilization measures and any associated technical (e.g., nature and scope of action) and administrative (e.g., reporting, public participation) requirements will be evaluated on a case-by-case basis and will be discussed by and between the department and Univar-StL.

As indicated under I.D. above, public/community involvement may be necessary for significant interim/stabilization measures. The need for any such involvement will be determined on a case-by-case basis. Any final agreements between the department and Univar-StL with respect to interim and/or stabilization measures and associated actions including, but not limited to, submittal of work plan/reports and scheduling shall be reduced to writing by Univar-StL. This LOA may require modification pursuant to I.G. to incorporate any interim/stabilization measures agreed to by the parties.

H. Corrective Measures/Final Remedy

If, based on the RFI findings and/or other relevant facility-specific information, Univar-StL or the department determines that a release(s) of hazardous waste and/or hazardous constituents presents an actual or potential threat to human health or the environment, a Corrective Measures Study (CMS) may be necessary. The necessity for a CMS and any associated requirements will be evaluated on a case-by-case basis and will be discussed by and between the department and Univar-StL. If a CMS is required, the department will notify Univar-StL in writing of this decision indicating the hazardous waste and/or hazardous constituent(s) of concern, environmental media of concern, and remedial alternatives to be

evaluated by Univar-StL (based on previous discussions with Univar-StL) including any specific alternatives which, in the department's judgment, may be capable of achieving applicable standards for protection of human health and the environment.

A CMS will not necessarily be required for Univar-StL. Univar-StL may propose, in the RFI Report or another LOA deliverable, one or more specific potential remedies for removal, containment and/or treatment of hazardous waste, including hazardous constituents in contaminated media, that are capable of achieving protection of human health and the environment.

Any proposed final remedy, whether presented in the CMS, RFI Report or another deliverable, shall be consistent with and address the specific remedy evaluation standards and general decision factors contained in Chapter IV. of the EPA guidance document entitled RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A and EPA's Subpart S Advance Notice of Proposed Rulemaking, May 1, 1996; 61 FR 19432-19464, as summarized below.

Any proposed final remedy shall present and discuss any interim and/or stabilization measures previously implemented at Univar-StL, including how these measures are consistent with the proposed final remedy and how they addressed the remedy evaluation standards outlined in the following paragraph. Any proposed final remedy shall also include a discussion of other potentially viable remedial alternatives that were considered, but were dropped from further consideration, including the rationale for elimination.

Any proposed final remedy shall include appropriate technical support and documentation and shall describe in detail, and summarize in a Statement of Basis, how the following remedy evaluation standards are addressed: 1) protection of human health and the environment; 2) attainment of media clean-up standards; 3) control of the source of releases so as to reduce or eliminate, to the extent practicable, further releases that may pose a threat to human health or the environment; 4) compliance with applicable standards in the management of contaminated environmental media and wastes; and 5) other general remedy decision factors (balancing criteria) including long-term reliability and effectiveness; reduction in contaminant toxicity, mobility and/or volume of wastes; short-term effectiveness; implementability; cost; and community acceptance.

Any proposed final remedy, whether presented in the CMS, RFI Report or another deliverable, shall specify the scope of work for final remedy implementation by addressing applicable elements of Chapter V. of the EPA guidance document entitled RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A and EPA's Subpart S Advance Notice of Proposed Rulemaking, May 1, 1996; 61 FR 19432-19464.

As indicated above, opportunities for meaningful public/community involvement in the ECAP process will, at a minimum, be necessary at the time of final remedy selection.

Univar-StL agrees to be responsible for providing public notice and opportunity for comment for any proposed final remedy for a minimum of 30 calendar days. Univar-StL also agrees to be responsible for establishing and updating, as necessary, a repository (typically the public library closest to Univar-StL) containing the complete corrective action administrative record, as determined by the department, for Univar-StL for public viewing prior to publishing any public notice pursuant to this LOA. The department agrees to make Univar-StL's complete corrective action administrative record available for public review at its offices, approve Univar-StL's public notice correspondence prior to publication, and be the recipient of and respond to comments, if any, received during the public comment period. Following the close of the public comment period, any public comments concerning the proposed final remedy will be addressed by the department in consultation with Univar-StL. Modification of the proposed final remedy in response to public comments, if necessary, shall be accomplished prior to final remedy implementation by Univar-StL including any necessary modification of documents and/or this LOA.

I. Final Remedy Implementation and Completion

Upon completion of the public comment period for the proposed final remedy, the department's response to any public comments and remedy modification, if any, in response to those comments, Univar-StL may be required to prepare and submit a work plan for final remedy implementation to the extent that other deliverables submitted pursuant to this LOA do not adequately describe the scope of work for the final remedy and the schedule for remedy implementation. Chapter V. of the EPA guidance document entitled RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A and EPA's Subpart S Advance Notice of Proposed Rulemaking, May 1, 1996; 61 FR 19432-19464 shall be used in developing the site-specific scope of work to be included in the work plan (if required) for final remedy implementation.

The final remedy implementation work plan (or equivalent information in the RFI Report and/or CMS) shall outline the objectives of the final remedy and shall contain, as applicable: 1) a detailed description of the design, construction, operation, monitoring, quality assurance, and maintenance requirements; 2) a cost estimate to define costs for design, construction, operation, maintenance, and monitoring; 3) a schedule for design, construction, and monitoring; and 4) management procedures for hazardous wastes and/or hazardous constituents during implementation of the final remedy.

Should corrective measures for groundwater prove necessary, Univar-StL shall demonstrate that groundwater contamination has not exceeded appropriate regulatory levels (e.g., promulgated standards, maximum contaminant levels, etc.), guidelines or other criteria (may include protective facility-specific risk-based levels) throughout the identified plume of groundwater contamination for a period of three consecutive years prior to submission of the final remedy implementation report, described below, to document that the final remedy is complete.

In the event that a long-term final remedy (e.g., groundwater pump and treat system with groundwater monitoring) is necessary, financial assurance for final remedy operation, maintenance and monitoring may be required. The amount of financial assurance will generally be based on the cost estimate contained in the final remedy implementation work plan or equivalent. The need for, timing, and acceptability/use of specific financial assurance instruments will be discussed/negotiated with Univar-StL on a case-by-case basis.

Upon completion of the final remedy (i.e., once the clean-up criteria for all contaminated media have been attained and/or long-term institutional/engineering controls are in place), Univar-StL shall submit a final remedy implementation report to the department. This report shall contain a summary of corrective measures activities conducted at the facility and a detailed description of any long-term operation and maintenance and/or monitoring program associated with the corrective measures. The final remedy implementation report shall be accompanied by a written certification stating that the final remedy has been completed in accordance with the approved work plan(s). This certification shall be signed by Univar-StL and an independent professional engineer and/or registered geologist licensed/registered in the state of Missouri.

J. Deliverables

A RFI Work Plan addressing the objectives outlined above shall be submitted by Univar-StL pursuant to this LOA. The necessity for and submission of any other work plans covering investigation, monitoring, interim/stabilization measures, corrective measures evaluation, and remedy implementation will be discussed with Univar-StL and addressed on a case-by-case basis.

A RFI Report containing the information outlined above shall be submitted by Univar-StL pursuant to this LOA. The necessity for and submission of any other reports covering investigation, monitoring, interim/stabilization measures, corrective measures evaluation, and remedy implementation will be discussed with Univar-StL and addressed on a case-by-case basis. SWMUs and/or AOCs requiring extended time periods for final remedy implementation (e.g., groundwater remediation) may necessitate submission of periodic progress reports which are more detailed than the Quarterly Progress Reports described below. Again, the necessity for and submission of such reports will be discussed with Univar-StL and addressed on a case-by-case basis.

From the time of execution of this LOA until a Certification of Completion has been issued to Univar-StL, Univar-StL shall submit to the department, within 60 days of the end of each calendar quarter, Quarterly Progress Reports summarizing all corrective action activities undertaken during the preceding calendar quarter. The Quarterly Progress Reports shall include the following information: 1) a description of the work completed; 2) summaries of all findings, including summaries of laboratory data; 3) summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify the

problems; and 4) deviations from approved work plans or schedules including justification for any delays and a revised projection of the completion date(s), and 5) projected work for the next reporting period. Detailed technical information submitted as part of other deliverables pursuant to this LOA need not be reproduced as part of the Quarterly Progress Reports.

By mutual consent, the department and Univar-StL may agree to reduce the frequency of reporting.

Univar-StL shall submit two copies of all reports, documents, plans, or specifications required under the terms of this LOA to:

Chief, Permits Section
Missouri Department of Natural Resources
Hazardous Waste Program
P.O. Box 176
1738 E. Elm Street (Lower Level)
Jefferson City, MO 65101 (65102 if use P.O. Box)

Univar-StL shall submit one copy of all reports, documents, plans, or specifications required under the terms of this LOA to:

Chief, RCRA Corrective Action and Permitting Branch
U.S. Environmental Protection Agency, Region VII
Air, RCRA and Toxics Division
901 N. 5th Street
Kansas City, KS 66101

K. Schedule

Except as otherwise agreed to and noted in this LOA, Univar-StL shall be allowed to propose, in the work plan(s), reports and/or other deliverables required by this LOA, its own schedule(s) for conducting the activities hereunder. The department expects that, any schedule(s) proposed by Univar-StL will be of reasonable duration and that once such schedules have been approved, they will be followed. The department does not anticipate formal processing of extension requests. It shall be Univar-StL's responsibility to document deviations from approved schedules in the Quarterly Progress Reports required by II.J. including the justification for the delay and a revised projection of the completion date(s).

