



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

March 25, 2010

Mr. Dave Geurts
Plant Manager
Cascade Corporation
2501 Sheridan Ave.
Springfield, OH 45505

RE: Signed Facility Lead Corrective Action Agreement (FLCAA)

Dear Mr. Geurts:

I've been informed by my staff at our Southwest District Office that their meeting with Cascade Corporation and your representatives on March 18, 2010 regarding the FLCAA was very cooperative and successful. Furthermore, I've received Cascade Corporation's signed copy of the FLCAA and am pleased to sign it. I'm confident now that it's finalized, the attached FLCAA will facilitate the company's ability to progress efficiently with implementation efforts, promote good communication amongst all stakeholders, along with ensuring proper agency oversight of activities directed by Cascade Corporation in addressing the corrective actions requirements.

Please do not hesitate in contacting Pam Hull at our Southwest District Office if you have any questions or concerns associated with our efforts in finalizing the attached agreement.

Sincerely,

Michael A. Savage, Chief
Division of Hazardous Waste Management

MAS:pm

g:savage/geurts.cascade

ec: Dave Sholtis, Assistant Chief, DHWM/CO
Jeff Hines, Chief, SWDO
Todd Anderson, Legal/CO
Pam Hull, DHWM/SWDO

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

Ohio EPA is an Equal Opportunity Employer

**FACILITY LEAD CORRECTIVE ACTION AGREEMENT
BETWEEN
THE OHIO ENVIRONMENTAL PROTECTION AGENCY
AND
CASCADE CORPORATION**

I. Purpose

The Ohio Environmental Protection Agency ("Ohio EPA") and Cascade Corporation (Cascade), collectively referred to as the "Parties," establish this Facility Lead Corrective Action Agreement ("Agreement") for Cascade to work independently and voluntarily to investigate, and as necessary, stabilize and remediate releases of hazardous wastes or hazardous constituents at or from the Cascade facility located at 2501 Sheridan Avenue, Springfield, Ohio 45505 (the "Facility"). The Parties believe that Cascade will appropriately, efficiently and effectively investigate and remediate the facility on an accelerated basis by following the procedures and guidelines set forth herein for Cascade's investigation of the facility, Ohio EPA's review of Cascade's investigation and selection of facility-specific remedial actions, and Cascade's implementation of agreed-upon remedial actions. This Agreement will have fulfilled its purpose and will terminate upon written acknowledgment by Ohio EPA that Cascade has completed its corrective action obligations under RCRA at the facility.

II. Background

Cascade owns and operates a manufacturing facility which is located at 2501 Sheridan Avenue, Springfield, Ohio, and is an Oregon Corporation licensed on March 16, 1959, to do business in the State of Ohio. In August of 1980, Cascade notified the United States Environmental Protection Agency ("U.S. EPA") of its hazardous waste activity at the Facility and was issued U.S. EPA Identification Number OHD004284923. At the Facility, Cascade generates hazardous waste as that term is defined by section 3734.01(J) of the Ohio Revised Code (ORC). These hazardous wastes are identified as listed hazardous wastes (F003, F005 and F006) and characteristic hazardous wastes (D001, D002, D005, D006 and D007) as set forth in Chapter 3745-51 of the Ohio Administrative Code (OAC). On February 19, 1988, Cascade notified Ohio EPA that a mixture of oil/water/spent 1,1,1-trichloroethane (F001) had leaked (same day) from the 2,000 gallon concrete chip runoff pit into the surrounding soil. On February 23, 1988, Ohio EPA inspected and collected samples from the east end of the Facility where the spill had occurred. Ohio EPA also collected representative samples of barium chromate sludge (F006) stored in 16 drums located at the end of the precipitation unit. This inspection and sampling activity and additional inspection activity in 1989, 1990 and 1991 resulted in the issuance on March 21, 1994 of Director's Final Findings and Orders ("Orders") requiring Cascade to remediate the sub-basement pit and the concrete chip run-off pit in accordance

with the closure performance standard contained in OAC rule 3745-66-11. Subsequent to the issuance of the Orders, Cascade submitted work plans and reports to Ohio EPA, along with revised plans and reports produced pursuant to review comments provided by Ohio EPA, and performed work at the Facility in accordance with work plans approved by Ohio EPA.

Between 1994 and 2000, Cascade submitted various plans (remediation action, groundwater monitoring, health & safety) and provided supplementary annual reports for the Part B Permitted Status Ground Water Monitoring activities. In 2000, Cascade began, and continues to date, providing quarterly groundwater monitoring reports to Ohio EPA (along with corresponding Supplementary Annual Reports).

On August 20, 2008, Cascade submitted to Ohio EPA a draft Closure Certification Document for the chip-runoff pit and the sub-basement pit. With regard to the contamination associated with the chip-runoff pit, Cascade used air sparge/soil vapor extraction (SVE) to treat the contaminated soil and performed some soil excavation. This work resulted in concentrations of 1,1-DCA & 1,1,1-TCA being non-detectable in the soil. The remaining concentrations of toluene detected in the soil excavation were below the Single Chemical Cleanup/RCN number of 2.5 mg/kg [which is protective of groundwater (20 DAF) and the cumulative calculation of the three detections was less than 1 when compared to the Hazard Index. Monitoring Well (MW) 12 samples show that a natural fluctuation exists for the hexavalent chrome concentrations which rise and fall with the water table, and occasionally exceed established Preliminary Remediation Goals (PRGs). Since the shut-down of Recovery Well-4 on November 6, 2006, total Volatile Organic Compounds (VOC) in MW-12 have continued to decline. Ground water contamination (associated with Waste Management Unit 9) and groundwater VOC contamination remain at the Facility, both of which are situated outside the scope of the two closure units identified above.

Cascade has done some investigatory work at other areas of the Facility. These other areas are commonly referred to as Waste Management Units ("WMUs"). Additional investigation may be needed to identify if a release has occurred and, if so, to determine the nature, rate and extent of the releases of hazardous wastes or constituents above facility-specific target levels.

Specifically, WMU 9, the former exterior hazardous waste storage area, warrants investigation as it is known to contain soil contaminated with VOCs and may be serving as a source of ground water contamination at the Facility. WMU-9 was identified by a U.S.EPA contractor that performed a Preliminary Investigation/Visual Site Inspection (PA/VI) and documented its findings in an April 11, 2001, report. Ohio EPA and Cascade expect that Cascade will investigate, and as necessary remediate, the Facility under the guidelines established in this Agreement.

III. Definitions

Unless otherwise stated, all terms used in this Agreement shall have the same meaning as defined in ORC Chapters 3734. and 6111, and the rules promulgated there under.

For purposes of this Agreement, the following definitions will apply:

- a. "Corrective Measures Study" (CMS) shall mean the activities to be undertaken to develop and evaluate potential remedial alternative(s) for the cleanup of the Facility;
- b. "Facility" shall mean the site owned and operated by Respondent known as Cascade Corporation located at 2501 Sheridan Avenue, Springfield, 45505, Clark County, Ohio; U.S. EPA Identification Number OHD004284923, where the treatment, storage, and/or disposal of hazardous waste, and/or the discharge into waters of the state of industrial waste or other waste has occurred, including any other area where hazardous wastes, industrial wastes, and/or other wastes have migrated or threaten to migrate;
- c. "RCRA Facility Investigation" (RFI) shall mean the activities to be undertaken to thoroughly evaluate the nature and extent of the releases of hazardous waste and hazardous constituents and to gather necessary data to support the Corrective Measures Study and/or Interim Measures;
- d. "Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents or hazardous substances) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes, hazardous constituents, or hazardous substances).

IV. General Provisions, Work to be Performed, Final Corrective Measures and Reports

A. General Provisions

The Parties agree that Cascade will act in a self-directed and independent manner to complete the tasks required by this Agreement and therefore complete corrective action at the Facility. Cascade is responsible for completing the investigatory and remediation activities identified in this Agreement. Cascade will perform the actions specified in this Agreement in the manner and by the dates identified and agreed upon by both Parties. Cascade will conduct all work identified in this Agreement in

compliance with RCRA and other applicable Federal and State laws and their implementing regulations; and consistent with relevant Ohio EPA and U.S. EPA guidance documents. Except as otherwise identified herein, Cascade will conduct the work outlined in this Agreement without prior approval of Ohio EPA.

The Parties agree to meet at least on a quarterly basis to discuss the work proposed and performed under this Agreement. The Parties agree to communicate frequently and in good faith so that Cascade can successfully complete the work identified in this Agreement in accordance with the time frames specified within this Agreement. Ohio EPA and Cascade will each designate a Project Manager and shall notify each other of the Project Manager each entity has selected within thirty (30) days of signature of this Agreement. Each Project Manager will be responsible for overseeing the implementation of the work required to implement this Agreement. The Project Managers can agree in writing to revise any deadline contained in this Agreement. The Parties may change their Project Managers, with prior notice.

Cascade will collect all waste, groundwater, surface water, soil, sediment and air samples in accordance with U.S. EPA Region 5's RCRA Quality Assurance Project Plan (QAPP) Policy (April 1998) as appropriate for the facility. Further, these samples will be sufficient to: 1) identify releases, consistent with the objectives of this Agreement; 2) encompass the extent of such releases, characterize such releases, and characterize release source areas to the extent necessary to assess the risk to human health and the environment, and 3) determine the need for and design of any stabilization and/or final corrective measures. Ohio EPA may, at its discretion, audit laboratories selected by Cascade.

To the extent possible, Cascade will notify Ohio EPA in writing at least 5 working days prior to beginning each separate phase of field work performed under this Agreement and prior to collecting samples. At the request of Ohio EPA, Cascade will provide or allow Ohio EPA or its authorized representative to take split or duplicate samples of all samples collected by Cascade pursuant to this Agreement.

Cascade will retain, during the term of this Agreement and for a minimum of six (6) years after its termination, all data, records, and final documents now in its possession or control, or which come into its possession or control, which relate in any way to this Agreement or to waste management activities at the facility.

Ohio EPA will provide Cascade with timely review, comment and, where indicated in this Agreement, approval of Cascade's submissions including the demonstrations, work plans, studies or reports identified below.

Cascade agrees to incorporate Ohio EPA's comments into revised submissions it will provide to Ohio EPA. In the event that Cascade disagrees with Ohio EPA's comments, the Parties, through their respective Project Managers, will attempt to work through the disagreements until agreement is reached. If the Project Managers are unable to reach agreement, the Parties will elevate the disagreement to the next person in each Party's supervisory chain for resolution.

B. Investigation-Related Work to be Performed

Cascade will submit to Ohio EPA a Project Schedule that lists the project milestones necessary to complete corrective action activities at the Facility. The Project Schedule shall be submitted within thirty (30) days of the effective date of this Agreement for Ohio EPA's review, comment and approval. Once it is approved, it will become Attachment 1 to this Agreement. The Project Schedule can be adjusted based on the mutual agreement of the Parties.

Cascade will compile and provide to Ohio EPA a Current Conditions Report (CCR) for establishing a "baseline" understanding of current environmental conditions at the Facility. The CCR shall evaluate soil, soil vapor, ground and surface water conditions at the Facility. When compiling the CCR Cascade will incorporate all additional waste-management or release related information which has occurred at the Facility since U.S.EPA's contractor conducted the PAVSI in April of 2001. The CCR shall be submitted within ninety (90) days of the effective date of this agreement for Ohio EPA review and comment.

Additionally, Cascade will take into consideration all existing Facility investigation data and formulate a Conceptual Site Model (CSM) to be submitted to Ohio EPA within 90 days of the agency's concurrence with the CCR. Based on the CSM, Ohio EPA will determine whether it is appropriate for Cascade to use those Preliminary Remediation Goals (PRGs) previously established in the Remediation Action Plan dated December 17, 1997. If determined to be appropriate by Ohio EPA, the PRGs will be used by Cascade to guide decisions on selecting chemicals of concern and conducting further investigation on contaminated environmental media at the site. Clean-up or target levels will include the risk-based PRGs, Maximum Contaminant Levels (MCLs) for contaminants in ground water and Ohio EPA's risk goal of 10E-5 and may also be influenced by additional factors such as remedial technology limits, analytical detection limits, and cost factors.

In the event that Ohio EPA determines that the information contained within the CCR does not adequately characterize the current environmental setting and associated site conditions, Ohio EPA will then

notify Cascade of the need to prepare a RCRA Facility Investigation (RFI) work plan. Such work plan would be devised to obtain either supplemental data on already identified WMU's (e.g., #9) or to characterize environmental conditions at newly identified WMU's at the site. Should Ohio EPA make the determination that more investigation is needed, the Parties will discuss the schedule for developing any necessary work plans and reports resulting from work performed.

Cascade shall submit to Ohio EPA a completed "Migration of Contaminated Ground Water Under Control" Environmental Indicator form within thirty (30) days of the effective date of this Agreement for Ohio EPA review and comment.

Cascade shall establish a publicly accessible repository for information regarding its corrective action work. Notice of the existence of the repository will be posted in the local, news[paper] media. Cascade, or its environmental consultant, will be available via phone or email to answer any questions which may arise from the public's review of the information. Cascade will perform additional public outreach to a target population within ½ mile of the facility's radius via flyers/notifications.

C. Corrective Measures Work to be Performed

Based upon a mutually agreeable schedule, Cascade will submit to Ohio EPA for its review and comment an array of final corrective measure(s) for the Facility within a Corrective Measures Study Report. Cascade will include within the Corrective Measures Study Report the data, factors and technologies necessary for Ohio EPA to make the final corrective measure selection, including, but not limited to, a demonstration that there are no unacceptable risks to human health or the environment above facility-specific target levels from hazardous waste or hazardous constituents at or from the facility under current or reasonable expected future land use or that these risks are adequately addressed. Ohio EPA's DHWM considers cancer risk levels exceeding 10^{-5} and non-cancer exposures exceeding a hazard index of 1 to pose unacceptable risks to human health. Cascade will include in its proposal a description of all of the corrective measures alternatives considered and the justification for its proposed alternative, supported by application of U.S.EPA's Threshold and Balancing Criteria and associated guidance referenced within the Corrective Measures Study Report. Ohio EPA may request supplemental information from Cascade if it determines the proposal and supporting information do not provide an adequate basis for selection of final corrective measure(s). Cascade will provide to Ohio EPA such supplemental information within ninety (90) days after receiving a request from Ohio EPA, assuming additional investigation is not necessary to obtain such information. If additional investigation is necessary, then Cascade will submit to Ohio EPA within

sixty (60) days of that decision a schedule for completion of such additional investigation.

Ohio EPA will provide the public with an opportunity to review and comment on the proposed final corrective measure alternative(s) it selects, including Ohio EPA's justification for proposing such final corrective measure(s) (the "Statement of Basis"). Following the public comment period, no more than 30 days, Ohio EPA will select the final corrective measure(s) for the Facility. Once final corrective measure(s) are selected by Ohio EPA, through a Decision Document signed by the Director of Ohio EPA, Cascade will provide demonstration of adequate financial assurance commensurate to the amount required to implement the selected corrective measure(s).

Within ninety (90) days of Ohio EPA's selection of the final corrective measure(s), Cascade will prepare a Corrective Measures Implementation Work Plan, subject to Ohio EPA review, comment and approval. Upon Ohio EPA approval of the Work Plan, Cascade will implement Ohio EPA's selected corrective measure(s) in accordance with the approved Work plan within ninety (90) days. Cascade shall submit to Ohio EPA for review, comment and approval a final Corrective Measures Completion Report documenting all work performed as scheduled in Ohio EPA's approval of the selected corrective measure(s). Cascade shall submit this report within ninety (90) days after completion of all construction activities.

D. Progress Reports

Cascade will continue to provide quarterly progress reports to Ohio EPA. These progress reports will summarize the work performed during the reporting period, data collected, problems encountered, and percent project completed by the 15th day of each month following a quarter [April 15, July 15, October 15, January 15]. Progress reports that are made following construction completion of any stabilization or corrective measure(s), will include summaries of activities documenting work performed, justification of decisions made, including sampling documentation, risk assessment documentation, construction completion documentation and/or confirmatory sampling results.

V. Modification, Termination and Satisfaction.

The express terms of this Agreement may only be modified by mutual agreement of Ohio EPA and Cascade. Any agreed-upon modification shall be in writing, be signed by both Parties, shall have as its effective date the date on which it is signed by both Parties and shall be incorporated into this Agreement. Modifications that pertain to the implementation of this Agreement, or attachments to this Agreement, may be agreed to and incorporated by written

signature of the Project Managers and a Cascade Representative. Either Party may unilaterally terminate this Agreement upon written notification of the other party. The Parties agree that the unilateral termination of this Agreement will not extend to the six-year record preservation requirements of Section III or the provisions of Section V, Reservation of Rights.

Cascade will conduct a monitoring program for a minimum of two years to measure the effectiveness of the final corrective measure unless the selected corrective measure as described in the Director's Decision Document requires a longer monitoring period. Cascade will continue to operate and maintain all necessary elements of the final corrective measure(s) until such time that Cascade submits to Ohio EPA documentation providing evidence that final corrective action remedy-specific cleanup objectives have been achieved and performance measures and termination criteria have been met. At that time Cascade may request in writing that Ohio EPA terminate this Agreement. Cascade will be responsible for preparing a request for Corrective Measures Completion and Termination.

Ohio EPA may decide that Cascade has completed the corrective measures for the entire Facility, for a portion of the Facility, or for a specified area, media, unit or release when it has determined that Cascade has met the corrective action cleanup objectives for the Facility. If Ohio EPA agrees that said objectives have been achieved, Ohio EPA will respond to Cascade's request for termination of this agreement with a letter stating that no further action is needed and the Facility has satisfactorily fulfilled its corrective actions obligations under Ohio law.

VI. Reservation of Rights

The Parties reserve any and all rights, remedies, authorities or defenses that they respectively have under any State or Federal law. Nothing in this Agreement limits or affects the authority or ability of either Party to take any action authorized by law. Nothing in this Agreement creates any legal rights, claims or defenses in either Party or by or for any third party. Nothing in this Agreement relieves Cascade from complying with applicable Federal, State and local laws. Both Parties agree that they may not use this Agreement in any subsequent administrative or judicial proceeding seeking specific performance of this Agreement.

Cascade is solely responsible for the proper performance of work contemplated by this Agreement. Ohio EPA's approval of any documents or work does not constitute final agency action nor is it a warranty or representation that the required cleanup performance standards will be met or that Cascade has obtained the required permits and approvals.

Cascade agrees to indemnify and save and hold harmless the State of Ohio, its agencies, departments, agents, and employees, from any and all claims or

causes of action arising from or on account of acts or omissions of Cascade or its officers, employees, agents, independent contractors, receivers, trustees, and assigns in carrying out activities identified in this Agreement. This indemnification shall not be construed in any way as affecting or limiting the rights or obligations of Cascade or the State of Ohio under their various contracts. Cascade shall not be responsible for indemnifying Ohio EPA for claims or causes of action solely from or on account of acts or omissions of Ohio EPA.

Nothing in this Agreement shall constitute or be construed as a release from any claim, cause of action, demand, or defense in law or equity, against any person, firm, partnership, or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken or migrating from the facility.

VII. Effective Date

This Agreement is effective upon signature of both Cascade Company and OEPA. The effective date will be the date upon which the last Party signs.

DATE: 3/10/10

BY: Joseph V. Ponder
Cascade Corporation

DATE: 3/24/10

BY: Michael A. Juy
Ohio EPA

g:msavage/CascadeFLCAA.doc
2-11-2010