

# CRYSTAL SPRINGS COMMUNITY ENGAGEMENT PLAN

**Prepared for Kuhlman Electric Corporation 101 Kuhlman Drive, Crystal Springs, MS**

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## **Executive Summary**

This Community Engagement Plan (CEP) has been developed as part of the Corrective Action Plan for the Kuhlman Electric Corporation (KEC) in Crystal Springs, Mississippi. It is part of an ongoing commitment to inform area residents about the environmental remediation activities being undertaken by KEC. Community meetings/open houses, phone surveys and small group meetings were conducted to prepare this plan.

The following are the primary components:

- Overview of the Corrective Action Plan (CAP)
- Key environmental remediation priorities at KEC and Crystal Springs
- Community engagement priorities

The CAP is part of an effort to identify and resolve environmental impacts resulting from past soil and groundwater contamination at the Kuhlman manufacturing building. KEC is undertaking these efforts in cooperation with and under direction from the Mississippi Department of Environmental Quality (MDEQ).

KEC continues to actively manufacture electrical transformers and is the largest private employer in the area. KEC is committed to working with MDEQ in connection with implementation of the approved corrective action plan to achieve required remediation goals.

## **Section 1: Introduction**

This Community Engagement Plan (CEP) has been developed as part of the Corrective Action Plan (CAP) for the Kuhlman Electric Corporation (KEC) in Crystal Springs, MS. This CEP is intended to inform and receive feedback from residents of the Crystal Springs community about the work performed under the CAP. The CEP describes the CAP and how it relates to KEC, the environmental concerns expressed by local residents, and community engagement and relations activities that may be scheduled to maintain effective communications with Crystal Springs' residents. The CEP is also intended to comply with Requirement 4 in MDEQ's March 1, 2012 approval of the CAP.

Crystal Springs area residents provided valuable input during the development of this CEP. Residents discussed their environmental interests and, specifically, their thoughts about operations at KEC. Surveys and meetings included local officials, interested citizens, neighbors, nearby business owners, representatives and elected officials. Once approved by MDEQ, this will be available for public review at the Crystal Springs Public Library during normal business hours, and at the MDEQ website.

## **Section 2: Corrective Action Plan**

The CAP is part of an effort to identify and resolve environmental impacts that may have resulted from past operations at KEC.

The objectives of the CAP are to accomplish the following:

- Ensure contaminants beneath the KEC plant building are at levels protective of workers;
- Reduce contaminant levels in the soil beneath the plant to levels that will not contribute to additional groundwater impacts; and
- Reduce contaminant levels in off-site groundwater to levels that are protective of area residents.

The CAP consists of several phases:

- Remedial Design
- Pilot Testing
- Remedial Action
- Long-Term Monitoring/Remedy Effectiveness Confirmation
- No Further Action

Prior to beginning the Remedial Design, a remedial investigation is typically completed. This phase involves a more detailed inspection and analysis than that conducted during initial inspections and investigations. Data specific to the technology being considered is collected and the precise nature and extent of the environmental impact is more fully defined. This information is used to select a remedial technology likely to be successful. The remedial investigation can be ongoing until a full scale remedial system is installed and operating. Although not specifically discussed in the CAP, KEC will be undertaking some additional remedial investigation before the remedial design is finalized. Additional on-site soil and/or groundwater samples will be collected and analyzed. This information will be used together

with data from the Pilot Test to confirm that the proposed technologies will be appropriate and effective.

In general, remedial alternatives may range from no-action to full remediation. These alternatives are evaluated according to technical practicality, cost effectiveness, regulatory requirements, environmental impact, and community relations. When a proposed remedial alternative is identified, the public is invited to comment on the proposed action. KEC and MDEQ extended this opportunity to comment to the community during several community meetings, as well as the January 12, 2012 informational open house. In this case, the proposed remedial alternative was Air Sparge/Soil Vapor Extraction technology, presented in the CAP. MDEQ officially accepted public comment on the CAP for 30 days after the January 12, 2012 open house. The CAP was formally approved on March 1, 2012.

The Remedial Design phase comes after a decision has been made on which remedial alternative to pursue. The Remedial Design is a detailed design of the selected Remedial Action. The design includes specifications and design drawings. The Remedial Design is used to implement the Remedial Action. KEC is currently in the Remedial Design phase of the CAP.

To improve the likelihood that the Remedial Design and Action provide the desired results, Pilot Tests are conducted. A Pilot Test consists of operating a small scale version of the selected remedial technology for a short duration and gathering performance data. KEC will initially be testing the Soil Vapor Extraction component of this technology. As of the date of this CEP, a pilot scale Soil Vapor Extraction system has been installed at the plant, and the testing has begun. Based on the response of site contaminants to the Pilot Test, KEC will evaluate the likely success of the technology and whether or not other remedial alternatives need to be considered. If Pilot Test appears to be effective, the Remedial Design will be finalized and submitted to MDEQ for approval.

Once the Remedial Design is approved, KEC will begin the Remedial Action. During the Remedial Action phase, KEC will strive to reduce the environmental impact to a level that will protect public health, welfare, and the environment. Currently, the proposed Remedial Action consists of a full scale Air Sparge/Soil Vapor Extraction System on-site and Long Term Monitoring of the groundwater off-site. Additional or alternative complimentary technology may be added at any point in the Remedial Action, as a result of the Pilot Test or as a result of Long-Term Monitoring results. State regulatory agencies (i.e. MDEQ) will oversee the remediation work and monitoring.

When contaminant levels reach target goals set by the state, such that they do not pose a threat to human health or the environment, KEC will submit the appropriate documentation and request that MDEQ issue a No Further Action decision. Public participation is welcomed and encouraged throughout this process. In fact, each of the action steps of this program is coordinated with appropriate state environmental offices. In addition, residents' concerns are an important part of all CAP decision making.

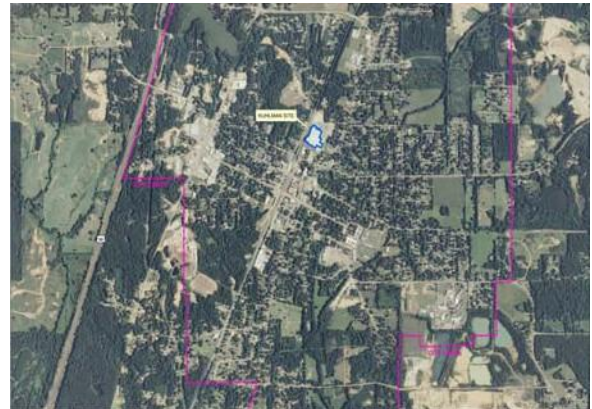
KEC is also working with MDEQ, MDOH, and the City of Crystal Springs to come up with a long-term solution to the impact to the City of Crystal Springs municipal supply wells.



The details of this solution have not yet been determined and are not included in the CAP at this time.

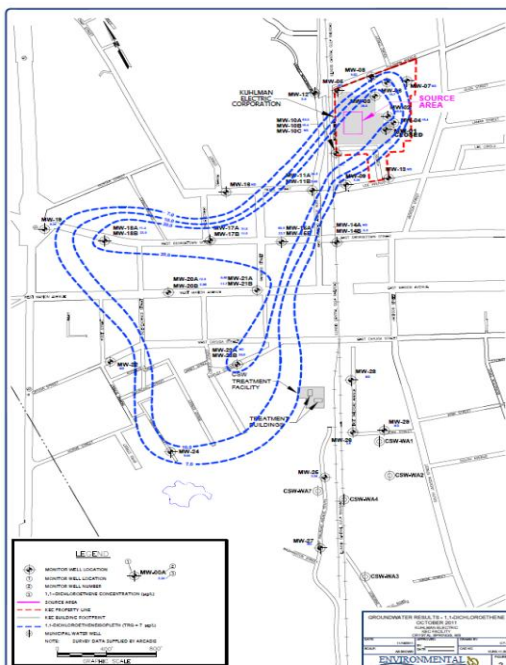
### Section 3: KEC Background and Site Investigation Results

Kuhlman Electric Corporation is located within the heart of Crystal Springs, Mississippi. It is the largest employer in Copiah County, drawing from a workforce pool within about 45 miles from the facility and providing hourly and salaried jobs for hundreds of workers. The KEC facility was constructed in 1956 to expand the power transformer product line. This facility allowed KEC to expand into the three phase small power transformer market. This was vital for rapid growth due to the distribution substation construction throughout North America. It has operated as an electric transformer manufacturing plant since that time and the future of the property is expected to remain industrial.



KEC has operated for more than 50 years at the Crystal Springs site. It was a subsidiary of a publicly owned company, Kuhlman Corporation until 1999 when BorgWarner acquired Kuhlman Corporation and sold KEC. When BorgWarner sold KEC in 1999, BorgWarner retained responsibility for environmental issues at various sites, including in Crystal Springs. Over a period of about 11 years, BorgWarner conducted a number of investigations and implemented corrective actions including soil and sediment remediation (most recently completed in 2011). Borg Warner also developed the CAP recently approved by MDEQ. KEC is taking the lead in implementing the groundwater remedies described in the CAP and is currently working with MDEQ under the Voluntary Evaluation Program (VEP).

### Findings of the Studies/Initial Remedial Actions



Contamination was identified in soil, sediment, soil vapor, and groundwater samples; however no imminent risks to human health were identified. Soils both on- and off-site were found to contain polychlorinated biphenyls (PCBs), as was the sediment in a nearby drainage ditch leading to Lake Chautauqua. Borg Warner conducted testing in the Lake under MDEQ oversight. Sediments, surface water, and fish were tested. Low concentrations of PCBs were found in some samples.

The studies also indicated that certain volatile organic compounds (VOCs) and degradation products associated with the manufacturing processes have impacted groundwater. The investigations specifically identified a VOC plume

consisting of 1,1-dichloroethene (DCE) and 1,4-dioxane extending southwest from the KEC site and in the direction of the City public supply wells. City Well CSW-7 was taken out of operation as a protective measure.

Sampling of the operating City Wells continues on a monthly basis and additional strategically placed groundwater monitoring wells (*See Appendix D*) are sampled quarterly or semi-annually. All monitoring results are submitted to the Mississippi Department of Environmental Quality (MDEQ).

A substantial amount of soil and sediment remediation was conducted on- and off-site by Borg Warner. As described in the Groundwater Assessment Report submitted by Martin & Slagle GeoEnvironmental Associates, LLC in 2009, the source of the groundwater contamination at the KEC site was identified beneath the southwest corner of the building. (*See Appendix E*) Soil beneath the floor slab in this area contains the following contaminants of concern (CoCs): 1,1,1-TCA, 1,1-DCE, 1,4-dioxane, and carbon tetrachloride. The CAP being implemented by KEC is intended to address this remaining on-site soil contamination and the resulting on- and off-site groundwater impacts.

KEC is also currently working with the City of Crystal Springs, MDEQ, and MDOH to resolve the issues associated with the loss of available water supply (capacity) from impacted City wells.

## **Remedial Action**

The general objective of the CAP is to mitigate the risk of any potential contaminant of concern (CoC) exposure to human and environmental receptors above risk-based standards. The specific objectives are to:

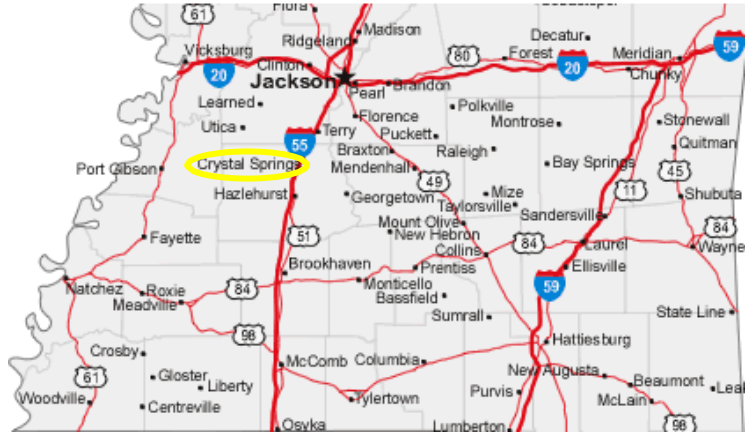
- Ensure contaminants beneath the KEC plant building are at levels protective of workers
- Reduce contaminant levels in the soil beneath the plant to levels that will not contribute to additional groundwater impacts
- Reduce contaminant levels in off-site groundwater

To accomplish these objectives, KEC will design, construct and operate a soil vapor extraction (SVE) system (*See Appendix C*) in the source area beneath the KEC building to reduce CoC concentrations in on-site soil and groundwater. KEC may also implement sparging (AS) technology. To improve effectiveness of this proposed strategy, KEC is conducting a Pilot soil vapor extraction test initially. Based on the response of site contaminants to the Pilot Test, KEC will evaluate the likely success of the technology and whether Air Sparge or other remedial alternatives need to also be considered. Monitored natural attenuation (MNA) is proposed for the off-site groundwater plume to track the expected decrease in CoC concentrations in groundwater resulting from the reduction the contaminant source area beneath the KEC building. KEC will also evaluate additional remediation measures for the off-site plume, as necessary, based upon the long-term routine monitoring results.

## Section 4: Area Profile

### Community Profile

Crystal Springs is located in Copiah County 23 miles southwest of Jackson, MS and is part of the Jackson Metropolitan Statistical Area. According to the 2010 Census Bureau data, it had a population of 5,044 with 61.4% being African American and 37.0% White. The per capita income for 2010 was \$16,881 with 23.5% of residents living below the poverty level. It comprises a land area in square miles of 5.43 with 929.3 persons per square mile.



The history of Crystal Springs dates back to 1823 when the original city was built at a site several miles west of its current location. In 1855, the citizens of the original Crystal Springs location and Copiah County were confronted by a major issue - whether or not to encourage the construction of a railroad from New Orleans to Jackson. The citizens agreed that it was beneficial and the railroad was constructed in 1858. This led to moving the city to the present site located along the railroad and on the ridge that separates the Pearl and the Mississippi rivers.

### Agricultural and Wildlife Resources

Crystal Springs relies heavily on its agricultural and wildlife resources. It is home to the Chautauqua Park and the Treetop Trail, a 1500 foot boardwalk that zigzags through the top of the trees, where children and adults can watch the birds soaring through the trees as they walk along the trail. The rich history of Crystal Springs finds its agricultural roots in the days when cotton was bringing very little profit, motivating a few farmers to try marketing tomatoes, other vegetables, and fruits to supplement. Soon Crystal Springs became the “Tomatopolis of the World” and tomatoes were much in demand in eastern markets; a new industry had been born making it a major produce shipping center in the United State until after World War II. Today, it is still home to the annual Tomato Festival held the last Saturday of June. It is also home to the recently constructed Calling Panther Lake, a 500 acre manmade lake maintained by the Mississippi Department of Wildlife and Fisheries.

## Section 5: Public Environmental Interests

### Telephone Survey

A total of 300 telephone interviews were completed in Copiah County between October 25 -



November 11, 2011:

- 157 with residents in the Crystal Springs ZIP code 39059
- 143 with residents of Copeiah County outside of Crystal Springs

No respondents worked for Kuhlman. So that opinion would be unbiased, the survey instrument did not reveal the sponsor of the survey.

Through the study, KEC was able to:

- Gauge community sentiment and identify community concerns
- Measure community favorability towards them and the rationale for that opinion
- Examine candidly what is being said about KEC within the community
- Determine whether the community is aware of past and current efforts on the part of KEC
- Understand frequently used communication vehicles

Specific data collected included:

**General community sentiment is positive, however, job concerns appear troubling.**

- 8 in 10 say the area is better or comparable to other small Mississippi cities in terms of quality of life.

**The economy is the greatest interest among Copeiah County residents (43%).**

- The economy is followed by social issues and education (20% mention for each)
  - The environment pales in comparison with only 2% of replies
  - Those responses related to the environment are varied and include topics of recycling, clear cutting, dirty/contaminated water, and pollution/contamination of the soil
- Even when aided, the environment and pollution are overshadowed by the economy/jobs and education concerns.

**Overall opinion of Kuhlman Electric is positive among Copeiah County residents with 72% indicating their opinion is extremely/somewhat positive.**

- In addition, two-thirds of Copeiah County residents indicate that Kuhlman Electric is better or comparable to other manufacturers in terms of its priority of health, safety, and the environment.
- Negative opinion appears to be more prominent:
  - Among those in the Crystal Springs ZIP code and those within the city limits of Crystal Springs
  - Among African-Americans

**Positive associations with Kuhlman Electric are the result of being a major community employer offering attractive pay and benefits.**

When asked to provide a rationale for their opinion of Kuhlman Electric, those 72% with a positive opinion mention:

- KEC employs/hires people
- KEC has good pay/benefits
- Positive comments from employees
- KEC is a stable company/steady employer
- They haven't heard anything negative

The 11% with a negative opinion gave the following reasons:

- They believe KEC polluted air/soil/water
- They believe pollution caused illness
- They believe KEC knowingly released chemicals
- They believe KEC is doing court-ordered clean-up

It is important to note that these were opinions expressed by residents and not necessarily facts. Since this was opinion research only, no efforts were made to present facts or correct misperceptions.

## **Public Issues**

Although a large percentage of those interviewed expressed a high personal interest in economic issues, we understand that the general public in the Crystal Springs shares a level of concern about environmental issues. KEC and MDEQ are committed to addressing these concerns through community engagement.

## **SECTION 6: COMMUNITY ENGAGEMENT**

### **Interaction with the Community**

To accomplish substantial benefits from community engagement, community consultation must move beyond the process of merely consulting people as users of public services or 'customers' into meaningful engagement.

### **What is Community Engagement?**

Engagement involves a range of activities that allows community members to be informed of KEC's remedial activities, and to have an understanding of the issues associated with the CAP.

These interactions can include everyday informal discussions and ongoing contact and small group meeting with stakeholders, holding larger group discussions and meetings, providing occasional newsletters and media announcements as necessary, maintaining a public information repository and project fact sheets, and public notifications.

The goal of Engagement in Crystal Springs is for community members to achieve the following:

- being more informed of KEC's remedial direction and activities,
- being able to have questions and concerns heard and addressed;
- having a better understanding of KEC decisions and priorities;
- working more collaboratively with KEC;
- not being in a coercive process that obliges people to agree but creating opportunities for different parties to voice opinions; and
- being in a dynamic relationship that events and activities contribute to, not merely a single event or activity.

KEC will also benefit from Engagement. Communities are complex and many issues involve a wide range of stakeholders often with different views. Engagement activities will incorporate the diversity, dynamics and culture of the community, help different groups deliberate issues constructively and manage potentially conflicting interests.

**Why is Community Engagement Important?**

Community members have expressed a desire to be informed of activities and see issues addressed. Transparency with community members, as well as elected officials, allows KEC and MDEQ to address the community’s concerns, which will lead to more successful project planning and implementation.

**Community Engagement Statement**

Community Engagement at Crystal Springs encompasses formal, planned opportunities for participation in exploratory, capacity building or decision making processes; information delivery or sharing; the informal building of relationships; and individual interactions between the corporation and residents.

KEC in undertaking Community Engagement encourages practices that can result in:

- The Crystal Springs Community being well-informed about issues, strategies or plans that may directly or indirectly affect them;
- KEC, staff and contractors engaging effectively and appropriately within the community when making decisions; and
- Community Engagement being appropriate, designed for task, audience and demographics across all areas of Crystal Springs.

To meet the informational desires of the community and to allow Crystal Springs area residents to participate in the remedial period process, KEC may schedule community relations activities throughout the process. The chart below lists potential community relations KEC or MDEQ could undertake to create mutual understanding on environmental cleanup actions. These activities will help meet the public’s information needs and keep area residents informed of remedial actions. Community relations activities will be employed as required by environmental regulation and to meet the needs of the community. It is understood that the Community Engagement Plan is a living document that will guide the ongoing process of outreach to and communication with the community and may (and in some cases already has) include the following elements:

<b>Elements of Engagement</b>	
<b>Points of Contact</b>	One of the most important community relations initiatives is the establishment of points of contact with both the local organization and with oversight of the remediation program. All general inquiries about activities on the Kuhlman Electric Corporation site should be referred to Tommy Kessinger, Community Relations for Kuhlman Electric Corporation, 101 Kuhlman Drive, Crystal

	Springs, MS, phone 601-892-6448 or Brenda Bell Caffee at Caffee, Caffee and Associates at 601-336-7212. All media inquiries should be made to Barry Dillon at ABB at 919-829-4379.
<b>Fact Sheets</b>	Fact Sheets will be developed to provide brief informative descriptions of the KEC Site, the status of studies and remedial actions, the process of remediation, and other special interest topics as requests arise. Fact sheets are typically one- to two-page information pieces that give concise explanations in laymen's terms of a particular site or program.
<b>Media Releases and Briefings</b>	News releases might be developed at noteworthy points in the remediation program when new or updated information warrants, and distributed to local newspapers and other media outlets that have previously expressed interest in the program. Media Briefings can be arranged if media representatives have the need for additional background on the Kuhlman Electric Corporation site, contamination, or cleanup program.
<b>Public Notices</b>	Formal public notices will continue to be published in local newspapers to inform community members of significant events in the process of remediation, such as public hearings, public comment periods, availability of certain documents and other regulatory requirements. These might be published as display ads or legal ads.
<b>Information Repository</b>	An information repository has been established at the Crystal Springs Public Library so community members can review the documents, fact sheets, brochures and other written materials relating to the activities on the KEC site. The information repository is intended as a resource to the public so they can become more aware of on-site activities related to the remediation.
<b>Local Briefings</b>	As warranted, briefings to community groups and local officials will be used to keep community leaders involved and informed as to the progress of remediation plans, schedule updates, results of sampling activities, and other environmental issues. These briefings give civic leaders the opportunity to learn about the program and answer any community concerns.

<b>Public Meetings and Open Houses</b>	This type of forum is usually less interactive than smaller meetings or briefings with fewer opportunities to hear everyone’s perspectives, but there are occasions when a public meeting or open house is the best way to get a large number of people together for the information exchange. The meeting can include a number posters, exhibits and displays that give audience members graphic representatives of site characterization activities, environmental findings, cleanup alternatives, or program schedules to help put into perspective the complexity that surrounds a cleanup of this type. KEC held an informational open house of this nature in January 2012.
<b>Direct Mailings</b>	Direct mailings, especially notices or newsletter, might be used to keep interested parties informed. A mailing list of community members has been developed for the site. An individual can be added to the list by contacting Brenda Bell Caffee.
<b>Comment Period and Comment Responses</b>	The public will be given various opportunities during the site remediation to comment on documents and to receive comment responses from the program managers. This allows the public a formal vehicle to register questions, comments, concerns, or suggestions about plans for the cleanup. Formal comment response documents will be prepared by KEC so the public gets feedback on their comments and knows how the comments are being incorporated into final decisions.

### Schedule for Engagement

The timing and frequency of activities will be adjusted to meet the level of public interest in the project. As requested, KEC will notify MDEQ by email a minimum of two (2) weeks prior to the planned activity. Additionally, a quarterly report will be submitted to MDEQ outlining which activities were completed and which ones, if any, were delayed and why. The report will utilize a letter format summarizing the activities accomplished in the quarter and include the headings: Task Initiated and/or Completed; Task Planned for Following Quarter; and Problems and Delays. Under each heading we will list the quarterly activities and comments.

CAP Milestone	Anticipated Date	Community Engagement Activities	Task Initiated and/or Completed	Task Planned for Following Quarter	Problems and Delays
Capacity Plan for Potable Water Supply, City of Crystal Springs (submitted to	Summer 2012	<ul style="list-style-type: none"> <li>• Concurrently submitted to the mayor of the City of Crystal Springs for review and comment.</li> <li>• Have a representative</li> </ul>			

CAP Milestone	Anticipated Date	Community Engagement Activities	Task Initiated and/or Completed	Task Planned for Following Quarter	Problems and Delays
MDEQ and MDOH June 8, 2012).		<p>at Tomato Festival June 30<sup>th</sup> 2012.</p> <ul style="list-style-type: none"> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Update civic leaders.</li> <li>• Approved document will be placed in public repository.</li> </ul>			
Capacity Plan Implementation  Interim Treatment System Final Design	Summer – Fall 2012	<ul style="list-style-type: none"> <li>• Will be submitted to MDEQ, MDOH, and engineers selected by the City of Crystal Springs.</li> <li>• Approved design will be placed in the public repository at the Crystal Springs library and on the MDEQ website.</li> <li>• Public notice upon approval.</li> <li>• Update civic leaders.</li> <li>• Publish in quarterly newsletter to interested parties.</li> </ul>			
Capacity Plan Implementation Interim Treatment System Construction Complete	Fall – Winter 2012	<ul style="list-style-type: none"> <li>• Public notice</li> <li>• Update civic leaders.</li> <li>• Publish in quarterly newsletter to interested parties</li> <li>• Attend regularly scheduled City meeting on an annual basis and provide update.</li> </ul>			
Capacity Plan Implementation  Long term volume replacement, as needed	Ongoing - 2015	<ul style="list-style-type: none"> <li>• Progress will be included in Groundwater monitoring reports submitted to MDEQ.</li> <li>• Update civic leaders.</li> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Attend regularly scheduled City meeting on an annual basis and provide update.</li> </ul>			



<b>CAP Milestone</b>	<b>Anticipated Date</b>	<b>Community Engagement Activities</b>	<b>Task Initiated and/or Completed</b>	<b>Task Planned for Following Quarter</b>	<b>Problems and Delays</b>
Expected results of Soil Vapor Extraction (SVE) Pilot Test	Fall 2012	<ul style="list-style-type: none"> <li>• Updates with individuals, as requested.</li> <li>• Results will be included in Final Design submitted to MDEQ. Once approved, MDEQ will place the design in a public repository at the Crystal Springs library and on the MDEQ website.</li> <li>• Publish in quarterly newsletter to interested parties.</li> </ul>			
Final design of SVE System	Winter 2012	<ul style="list-style-type: none"> <li>• A final design will be submitted to MDEQ for review and approval. Once approved, MDEQ will place the design in a public repository at the Crystal Springs library and on the MDEQ website.</li> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Update civic leaders.</li> </ul>			
Installation of SVE System	Spring-Summer 2013	<ul style="list-style-type: none"> <li>• Construction report will be submitted to MDEQ.</li> <li>• Approved report will be placed in public repository at Crystal Springs library and on MDEQ website.</li> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Attend regularly scheduled City meeting on an annual basis and provide update.</li> </ul>			
Monitored Natural	Ongoing Quarterly-	<ul style="list-style-type: none"> <li>• Groundwater Monitoring Reports</li> </ul>			

CAP Milestone	Anticipated Date	Community Engagement Activities	Task Initiated and/or Completed	Task Planned for Following Quarter	Problems and Delays
Attenuation (MNA)/ Groundwater Monitoring	to Semi-Annually	<p>will be sent to the Mississippi Department of Environmental Quality (MDEQ) following each sampling event.</p> <ul style="list-style-type: none"> <li>• Final Monitoring Reports will be placed in a public repository at the Crystal Springs Library and the MDEQ website.</li> <li>• Updates with individuals, small groups as requested.</li> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Attend regularly scheduled City meeting on an annual basis and provide update.</li> </ul>			
Ongoing SVE operations	Ongoing Quarterly-to Semi-Annually	<ul style="list-style-type: none"> <li>• KEC will submit a summary of the active SVE operations within the Ground Water Assessment Reports.</li> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Attend regularly scheduled City meeting on an annual basis and provide updates.</li> </ul>			
Air sparge (AS) vs. alternative remedial method evaluation – KEC will evaluate the effectiveness of the SVE system and either proceed with the installation of Air Sparging or an alternative	Spring 2014	<ul style="list-style-type: none"> <li>• Recommendations will be made available to MDEQ in written format. Any changes to the CAP approved by MDEQ will be posted to the public document repository.</li> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Attend regularly scheduled City</li> </ul>			

<b>CAP Milestone</b>	<b>Anticipated Date</b>	<b>Community Engagement Activities</b>	<b>Task Initiated and/or Completed</b>	<b>Task Planned for Following Quarter</b>	<b>Problems and Delays</b>
plume treatment scenario.		meeting on an annual basis and provide updates.			
Contingencies/In Situ Treatment – Once the system has been operating for a sufficient amount of time the groundwater trends will be reexamined and KEC will determine if the treatment technologies are meeting the CAP objectives and report accordingly.	2014 – 2015	<p>Will be summarized on Groundwater Monitoring reports.</p> <ul style="list-style-type: none"> <li>• Final Monitoring Reports will be placed in a public repository at the Crystal Springs Library and the MDEQ website.</li> <li>• Updates with individuals, small groups as requested.</li> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Attend regularly scheduled City meeting on an annual basis and provide updates.</li> </ul>			
No Further Remedial Action Request	2015	<ul style="list-style-type: none"> <li>• Formal request will be submitted to MDEQ when data supports it.</li> <li>• public notice</li> <li>• Publish in quarterly newsletter to interested parties.</li> <li>• Attend regularly scheduled City meeting on an annual basis and provide updates.</li> </ul>			

### **For Additional Information**

KEC welcomes and encourages public participation throughout this process. Resident’s concerns are an important part of all KEC decision-making. Points of contact are provided above. Comments and concerns can also be emailed to KEC at [crystalspringsinfo@us.abb.com](mailto:crystalspringsinfo@us.abb.com).

## **APPENDICES**

Items included in the appendices:

Appendix A: Information Repositories

Appendix B: Glossary of Terms

Appendix C: Diagram of Air Sparging/Soil Vapor Extraction

Appendix D: Monitoring Wells Diagram

Appendix E: Extent of Source Area Soil Impacts Diagram

**Appendix A: Information  
Repositories**

The public information files for the KEC/Crystal Springs CAP are held at:

**Crystal Springs Public Library**

Information Desk  
200 South Jackson Street  
Crystal Springs, MS 39059

Monday – Friday: 9:00am – 5:00pm

Saturday: 9:00am – 11:00am

Sunday: Closed

**Virtual Repository**

The Mississippi Department of Environmental Quality Website:

<https://www.deq.state.ms.u>

## Appendix B: Glossary

**Air Sparging (AS):** The injection of air into the groundwater and soil to transfer the contaminants to a vapor phase, which can then be sucked out of the soils by the soil vapor extraction.

**Focused Site Investigation:** Designed to assess the presence or absence of impacts identified as potentially being present by the Preliminary Assessment.

**Groundwater:** Water beneath the earth's surface, found in soil, sand, and other porous substances. Groundwater may be pumped to the surface and used as a source of drinking water or for irrigation.

**Hydrogeologic Study:** The study of groundwater, with particular emphasis on the chemistry and movement of water.

**Information Repository:** A place where current information, technical reports, and reference documents concerning the site are stored. The Information Repository is usually in a public library and is available for public access and review.

**Remedial Action (RA):** The actual construction or implementation of the remedy selected to contain, control, or remediate an identified site. Follows the Remedial Design phase.

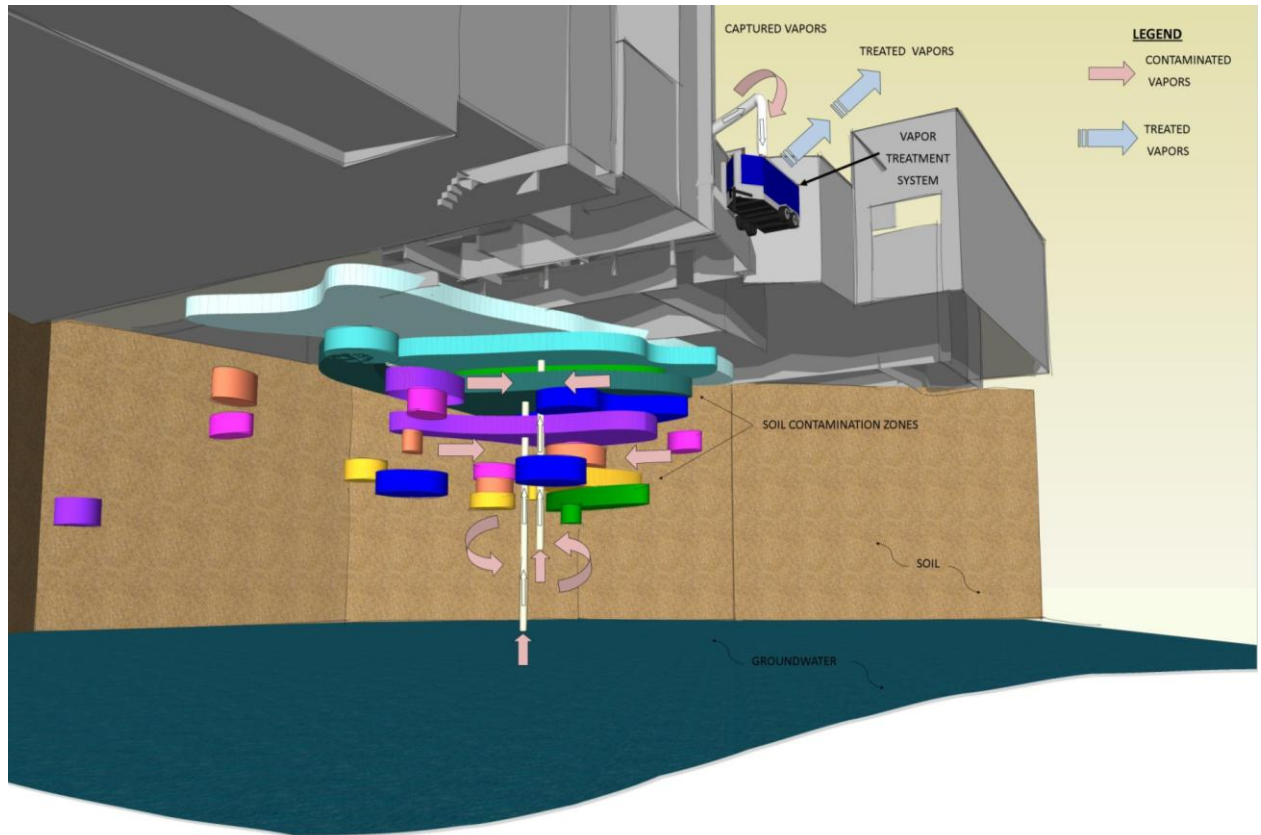
**Remedial Design (RD):** The development of technical specifications and engineering design necessary to carry out a Remedial Action.

**Soil Vapor Extraction (SVE):** A method by which vapors within the soil are "vacuumed" out and either discharged away from occupied areas or treated and then discharged.

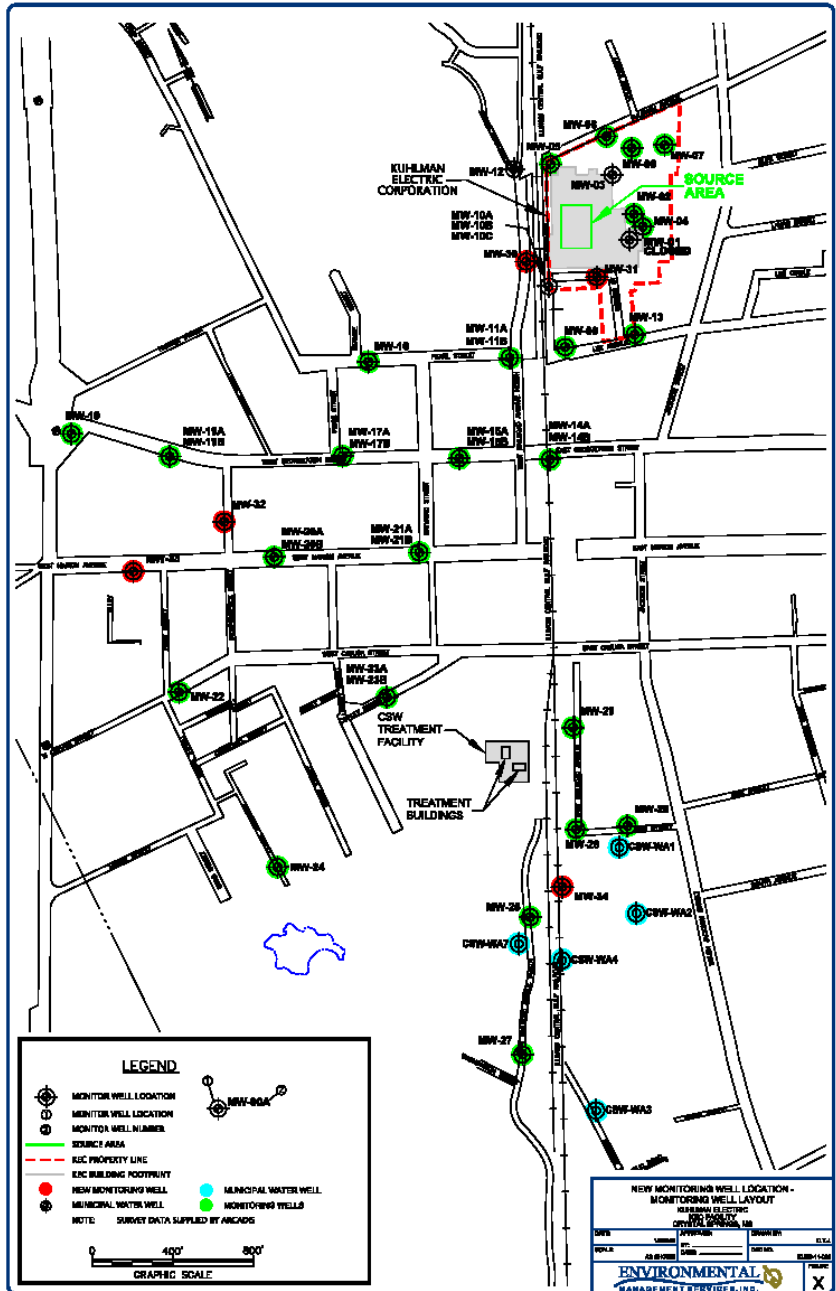
**Surface Water:** Ground-level bodies of water, such as rivers, lakes, and streams.



Appendix C: Diagram of Air Sparging/Soil Vapor Extraction



# Appendix D: Monitoring Wells Diagram



## Appendix E: Extent of Source Area Soil Impacts Diagram

