| **CAP Milestone** | **Anticipated Date** | **Planned 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 MDEQ, and MDOH June 8, 2012). | Summer 2012 | * Concurrently submit to the mayor of the City of Crystal Springs for review and comment.
* Publish in quarterly newsletter to interested parties.
* Update civic leaders.
* Approved document will be placed in public repository.
 | * Capacity Plan for Potable Water Supply approved by MDEQ in December 2012.
* Quarterly Newsletter distributed to Crystal Spring’s residents and businesses in January 2013.
* Mayor and Civic leaders were updated through the Newsletter.
* Documents placed in the public repository. Also available upon request.
 | - None at this time. This milestone is complete. | - None at this time. |
| Capacity Plan Implementation Interim Treatment System Final Design | Summer –Fall 2012 | * Will be submitted to MDEQ, MSDH, and engineers selected by the City of Crystal Springs.
* Approved design will be placed in the public repository at the Crystal Springs library and on the MDEQ website.
* Public notice upon approval.
* Update civic leaders.
* Publish in quarterly newsletter to interested parties.
 | * The bench study and final design was successfully completed.
* The MDSH issued a letter of concurrence with the proposed interim treatment system design in November 2012.
* The final design was approved by MDEQ in December 2012.
* Public notice and updates to civic leaders were provided via quarterly newsletter in January 2013.
 | * None at this time. Design is complete.
 | - None at this time. |
| Capacity Plan ImplementationInterim Treatment System Construction Complete | Fall 2013 | * Public notice
* Update civic leaders.
* Publish in quarterly newsletter to interested parties
* Attend regularly scheduled City meeting on an annual basis and provide update.
 | - Treatment system site preparation and construction complete. - Public notice provided in The Meteor article published Nov 6, 2013.- Update published in quarterly newsletters October 2013.- Capacity Plan for Potable Water Supply Status Report submitted to MDEQ and City in August 2013.- Tests conducted in Sept/Oct 2013 confirmed the system will perform as designed.- Operations Demonstration conducted for City, MDOH, and MDEQ Oct 30, 2013.- Ready to be activated if treatment of the City wells becomes necessary.- Emergency Generator added July 2015. | - System will remain on standby and water quality will continue to be monitored on a regular basis.- If operation is required, establish City update schedule. | - None at this time. |
| Capacity Plan ImplementationLong term volume replacement, as needed | Ongoing | * Progress will be included in Groundwater monitoring reports submitted to MDEQ.
* Update civic leaders.
* Publish in quarterly newsletter to interested parties.
* Attend regularly scheduled City meeting on an annual basis and provide update.
 | - Updates via newsletters, Capacity Plan for Potable Water Supply Status Report (August 2013), verbal reports.* Collaboration with City.
* Access and testing approved by Board of Aldermen October 7, 2014.
* Public Notice for public supply wells October 8-18, 2014.
* Well Permits October 21, 2014.
* Test Wells January 2015.
* Design for Two Supply Wells approved by MDOH 2015.
* Supply Wells CSW-WA9 and CSW-WA10 complete January 2016.
* CSW-WA9, CSW-WA10 approved July 2016.
* CSW-WA9, CSW-WA10 operating June 2017.
* CSW-WA1 and CSW-WA2 taken out of service July 2017.
* Water Main easements acquired.
* Additonal supply well location being tested.
 | * Collect bids on additional water main to facilitate long-term connection to municipal treatment and distribution plant.
* Testing of current test well along Harmony Road.
* Design/site additional Supply Well.
* Continued collaboration with City.
 | * Additional test well needed; this has delayed this task.
 |
| Expected results of Soil Vapor Extraction (SVE) Pilot Test | Fall 2012 | * Updates with individuals, as requested.
* 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.
* Publish in quarterly newsletter to interested parties.
 | * The initial test of the proposed Soil Vapor Extraction (SVE) procedure was successfully completed in May 2012.
* The results were be included in the final design submitted to MDEQ.
* Updates on this milestone were included in the October 2012 Quarterly Newsletter.
* Pilot Test Report and SVE Conceptual Design submitted to MDEQ in February 2013; approved in July 2013.
 | - None at this time. This milestone is complete. | - None at this time. |
| Final design of SVE System | Fall 2013 | * A final design will be submitted to MDEQ. Once approved, MDEQ will place the design in a public repository at the Crystal Springs library and on the MDEQ website.
* Publish in quarterly newsletter to interested parties.
* Update civic leaders.
 | * Detailed design work has been completed for design, procurement, and installation of the SVE system.
* Conceptual Design was submitted to MDEQ in February 2013, revised May 2013, and approved July 2013.
* Soil Vapor Extraction Final Design and Quality Assurance Project Plan submitted to MDEQ September 2013, approved by MDEQ October 2013.
* Update on this milestone was included in the July 2013, October 2013, and January 2014 Newsletters.
 | * None. This milestone is complete.
 | - None. |
| Installation of SVE System | Winter 2013-2014 | * Construction report will be submitted to MDEQ.
* Approved report will be placed in public repository at Crystal Spring’s library and on MDEQ website.
* Publish in quarterly newsletter to interested parties.
* Attend regularly scheduled City meeting on an annual basis and provide update.
 | - Extraction well installed as part of the SVE pilot test in 2012. * Soil Vapor Extraction Final Design and Quality Assurance Project Plan approved by MDEQ October 2013.
* Installation of the full scale SVE system was completed December 2013 - April 2014. Optimization and start of operation occurred in May 2014.
 | - None at this time. This milestone is complete. | - None at this time. |
| Monitored Natural Attenuation (MNA)/ Groundwater Monitoring | Ongoing Semi-Annually  | * Groundwater Monitoring Reports will be sent to the MDEQ following each sampling event.
* Final Monitoring Reports will be placed in a public repository at the Crystal Springs Library and the MDEQ website.
* Updates with individuals, small groups as requested.
* Publish in quarterly newsletter to interested parties.
* Attend regularly scheduled City meeting on an annual basis and provide update.
 | - Semi-Annual Groundwater Assessment Report submitted to MDEQ.* Two additional monitoring wells installed December 2015.
* Notice of upcoming reports/sampling included in quarterly newsletters.
* Documents submitted to MDEQ for placement in the public repository. Also available upon request.
 | * KEC will respond to any comments that might be received on the Semi-Annual Groundwater Assessment Report submitted to MDEQ.
 | * City meeting schedule not established. City satisfied with verbal updates and newsletters to date.
 |
| Ongoing SVE operations | Ongoing Quarterly- to Semi-Annually | * KEC will submit a summary of the active SVE operations within the Ground Water Assessment Reports.
* Publish in quarterly newsletter to interested parties.
* Attend regularly scheduled City meeting on an annual basis and provide updates.
 | - Soil Vapor Extraction System Semi-Annual Report issued September 2015.* Monitoring, operation and maintenance of SVE is ongoing.
* Updates are included in quarterly newsletters.
* Performance assessment soil sampling program completed 4Q 2016. Report submitted 1Q2017.
 | - Operation and monitoring of full scale system. | - None at this time. Attendance at City meetings not requested. |
| 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 plume treatment scenario.  | Fall - Winter 2014 | * 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.
* Publish in quarterly newsletter to interested parties.
* Attend regularly scheduled City meeting on an annual basis and provide updates.
 | - Timing for this milestone is pending monitoring results from operation of the SVE system. To date, the system continues to remove contamination from beneath the building slab. | - Continued evaluation of SVE system performance.-Augmentation design. | - SVE System start up delayed until 2014; performance evaluation also delayed. |
| Contingencies/In Situ Treatment –Groundwater trends will be reexamined and KEC will determine if the treatment technologies are meeting the CAP objectives. | 2014 – 2015  | * Will be summarized on Groundwater Monitoring reports.
* Final Monitoring Reports will be placed in a public repository at the Crystal Springs Library and the MDEQ website.
* Updates with individuals, small groups as requested.
* Publish in quarterly newsletter to interested parties.
* Attend regularly scheduled City meeting on an annual basis and provide updates.
 | - Groundwater trends were evaluated 2016. Additional data is being collected. However, indications are that SVE is making progress toward CAP objectives. | - Data evaluation will continue in 2019. | - Delayed due to delayed implementation and ongoing effectiveness of SVE system. |
| No Further Remedial Action Request (Monitoring Only) | To Be Determined | * Formal request will be submitted to MDEQ when data supports it.
* Public notice.
* Publish in quarterly newsletter to interested parties.
* Attend regularly scheduled City meeting on an annual basis and provide updates.
 | - This milestone will be completed pending the results of planned remedial actions. | - None at this time. | - None at this time. |