

Evaluation of Corrective Action Conferences

Underground Storage Tank Section
February 2009

Background

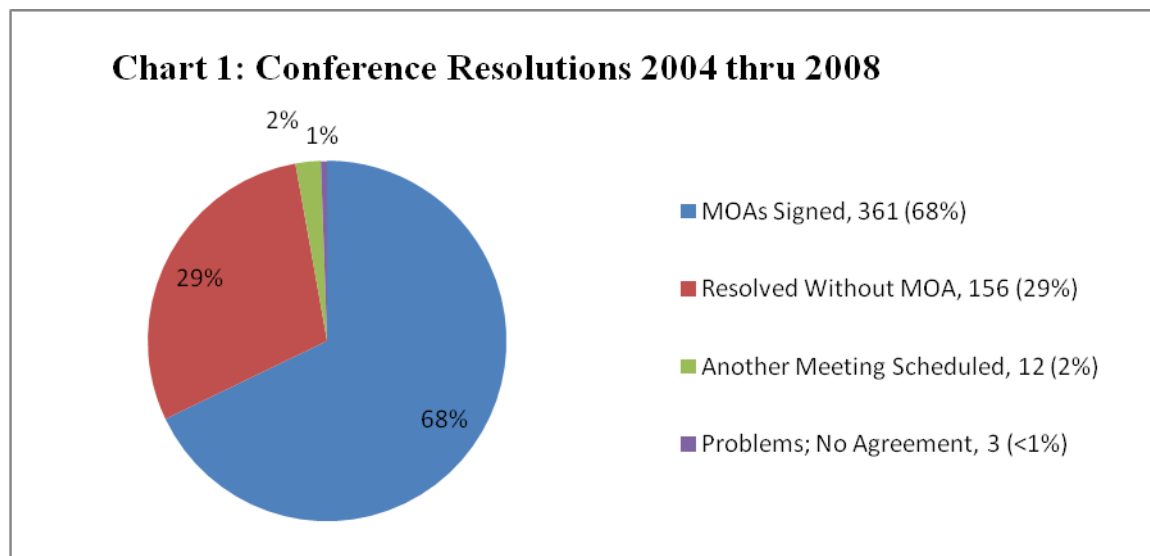
In 2004, a backlog of high risk LUST sites in need of corrective action prompted the UST Section and stakeholders to examine the process by which corrective action is planned and implemented. The team recommended instituting a system whereby all interested parties of a high risk site participate in one or two conferences to reach a consensus on a corrective action plan, a budget, and a schedule of events. Upon consensus, all parties sign a memorandum of agreement (MOA) outlining the activities, who will pay for them, and when they will occur.

Information About Conferences

The UST Section conducted the first corrective action conference on July 23, 2004. A full-time corrective action facilitator position was added to the UST staff in January 2005. By January 1, 2009 staff had facilitated 867 conferences covering 532 sites.

Of the 532 sites included during 2004 through 2008, signed MOAs were completed on 361 sites (68%); 156 sites (29%) were resolved without needing an MOA; 12 sites (2%) are still awaiting an additional meeting. For three sites (<1%), no agreement could be reached and no further meetings are scheduled (Chart 1).

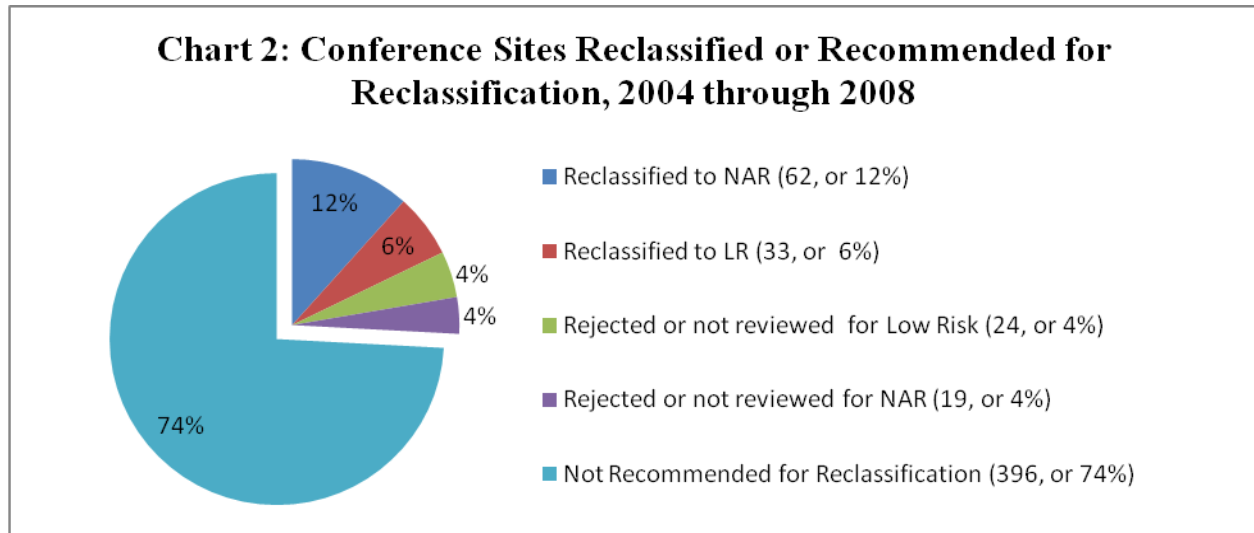
A change to Chapter 135 in 2008 modified the status of the MOA. Formerly the MOA was a ‘handshake’ agreement, not a legal document. Now the Iowa Administrative Code 135.12 (9) “d” states: “Owners or operators who fail to implement actions or meet the activity schedule in a memorandum of agreement resulting from a corrective action meeting or other written corrective action plan agreement or who fail to implement the actions or schedule outlined in an approved CADR are subject to legal action.”



Successes of Conferences

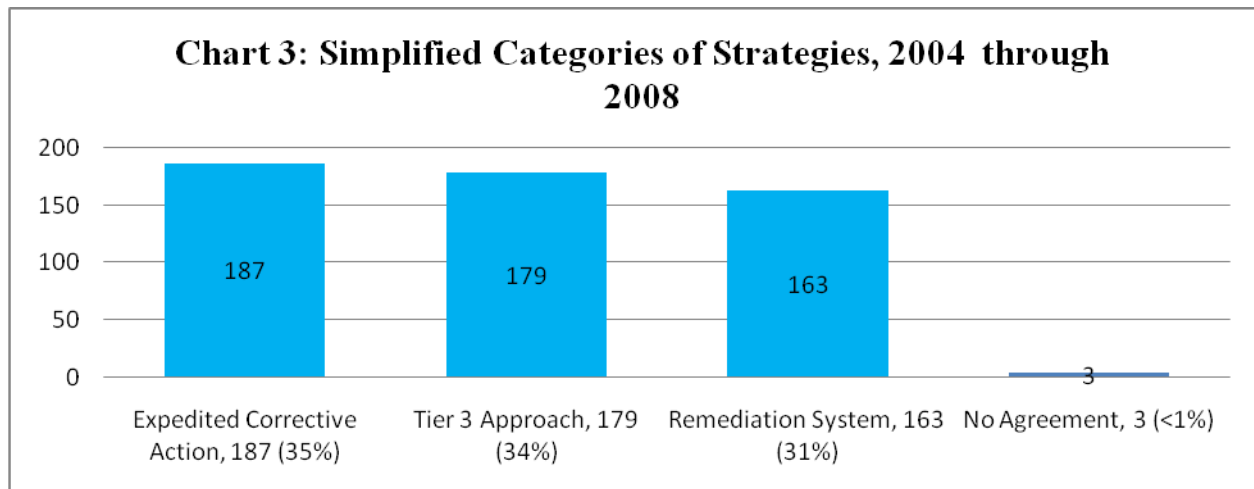
Based upon the goals set up by the 2004 business improvement event, the corrective action conferences have been very successful in the last 4.5 years.

- More than 95% of the 532 sites have been guided toward and into corrective action.
- 138 sites have been reclassified (or recommended for reclassification) to low risk (LR) or no action required (NAR) after conducting the corrective actions (Chart 2).
- 74 sites had active remediation systems running in 2008 with the goal to reclassify the site and/or to remove free product.
- Approximately 65 sites are in post remediation monitoring after over-excavation of contaminated soil and/or shutdown of active remediation systems.

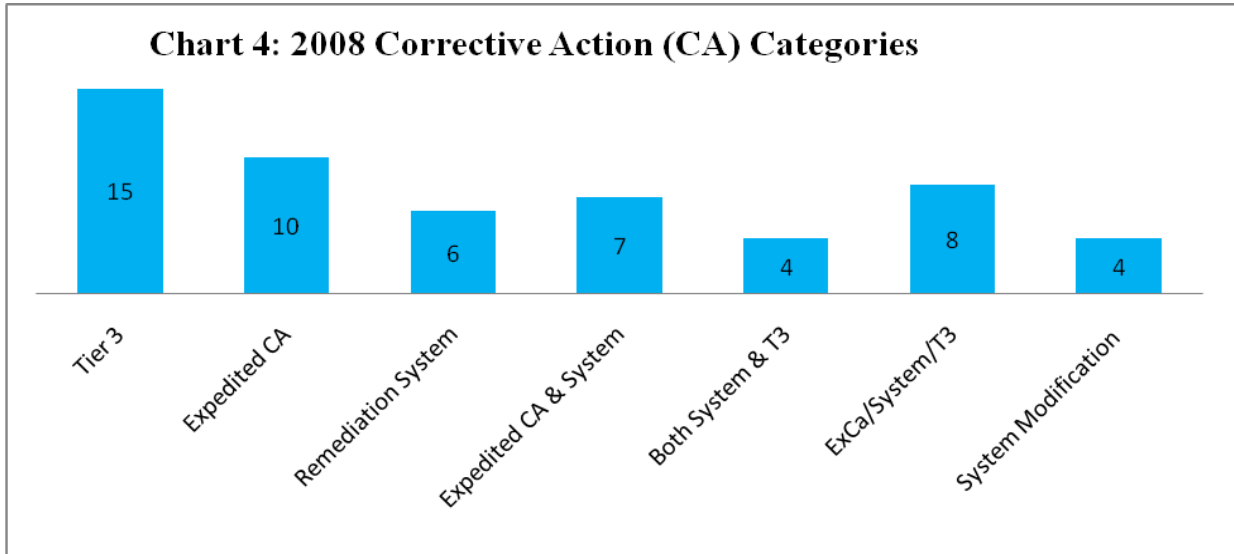


Corrective Action Strategies

Of the 532 sites that have had conferences, 187 (35%) have undergone or will undergo expedited corrective action such as plastic water line replacement or over-excavation; 179 (34%) have been or will be addressed using a Tier 3 approach such as specific sampling or documenting a steady/declining plume; 163 (31%) will undergo remediation such as soil vapor extraction; and less than 1% have been unable to reach an agreement (Chart 3). This categorization schema is somewhat simplified; the actual strategies may involve multiple techniques used together and in stages.



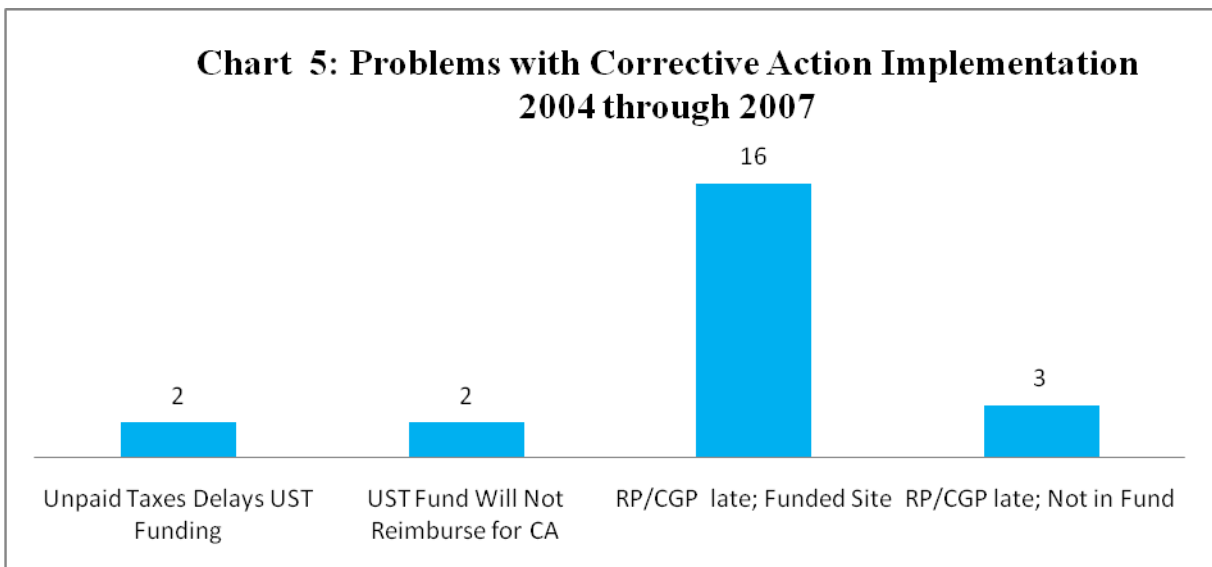
The corrective action strategies or categories become more complex as multiple corrective action techniques are needed to address the complex conditions at some high risk sites (Chart 4).



Problems: Reaching Agreement and Implementing Corrective Action

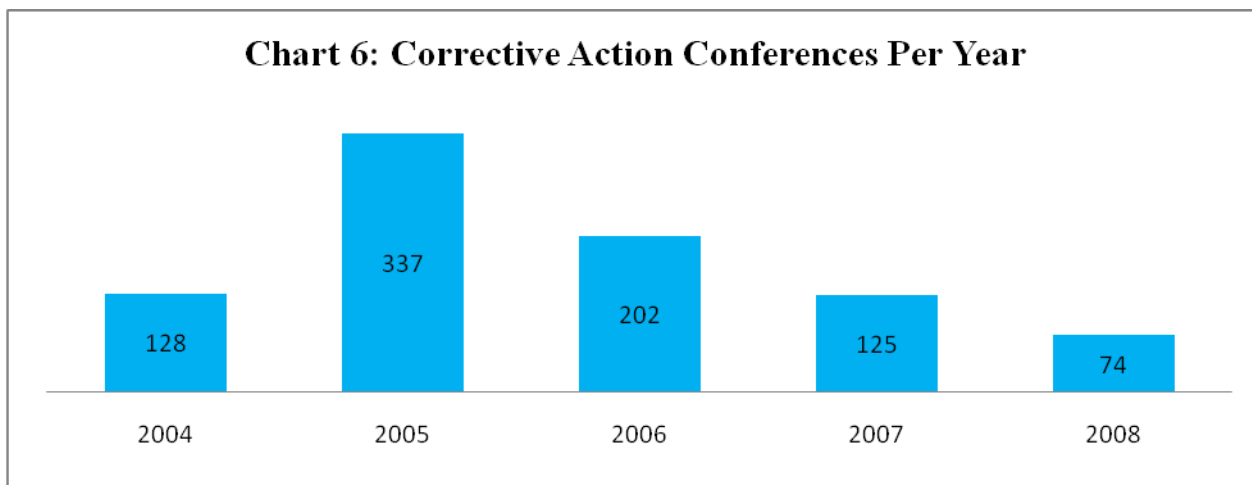
Although the conference process has been successful, problems have been encountered:

- Agreement could not be reached by participants for three sites.
- Five sites are on hold with no further meetings planned because the participants could not resolve funding issues (Chart 5).
- The less-complex sites have been addressed; the remaining high risk sites needing conferences often require a significant amount of time for DNR UST staff to establish the responsible party, determine funding eligibility, coax the affected parties to the conferences, review past reports, monitor progress and work through treatment system modifications, when necessary.
- After agreement is reached, reluctant responsible parties, over-scheduled consultants, shortage of DNR UST staff, or UST Fund Board indecisions or denial of claim approvals can result in the delay of implementation or cessation of corrective action.



Changes in Corrective Action Conferences

- Many conferences now scheduled are to address problems with remediation systems, monitoring plans, or proposed closure sampling. These conferences often require more study, research, and consensus building than earlier ones.
- Conferences held to help troubleshoot technical problems with remediation systems have led to other site activities: pilot tests, system modifications.
- Some conferences have been held for low risk sites to guide them toward no action required.
- As known remediation technologies evolve and new techniques are introduced, UST staff must learn how to evaluate the application of these new technologies and determine adequate monitoring practices to ensure the technologies are addressing the high risk conditions.
- Staff reductions implemented in 2006 and 2008 limit UST staff availability for conferences. Also, significant staff time is devoted to follow-up on the 532 sites shepherded through the Corrective Action meeting process since 2004.
- Fewer conferences are scheduled. An average of 27 conferences per month was held in 2005; 18 per month in 2006; 11 per month in 2007; 6 per month in 2008 (Chart 6). In 2009, 8 meetings were held in both January and February, and 13 meetings are set for March.
- The backlog of high risk LUST sites in need of corrective action has been reduced significantly. Many of the sites yet to be addressed have problems such as recalcitrant responsible parties, funding or legal problems, unusual geology, or other complex issues.
- Tracking the progress (or lack of progress) of the large number of sites undergoing corrective action requires increasing time and resources. Enforcement efforts are likely to increase in the coming months, as well.



As of December 31, 2008, approximately 750 sites have been identified as and remain high risk. Our goal is to hold 70 to 100 corrective action conferences per year. These may include sites where a remediation strategy is underway or completed, but the system or the monitoring may need re-evaluation. Although the total number of high risk sites continues to decline, the remaining sites may likely require more complex corrective action. Also, as new or newly discovered releases are assessed, and determined to be high risk, more conferences will be needed.

*** Iowa DNR acknowledges and thanks EPA for providing funds to support the Corrective Action Facilitator position over the past four years.**