

Corrective Action Report

Guidance Document 15

The **Corrective Action Report** should summarize the Corrective Action(s) (CA) taken at the site. You must provide enough detail for Minnesota Department of Agriculture (MDA) Incident Response Unit (IRU) staff to evaluate the results and effectiveness of the CA performed. In general, the Corrective Action Report should be submitted after all approved CA are complete; however, in cases where the CA are implemented in phases, a Corrective Action Report should be submitted at the completion of each phase.

The contents of the Corrective Action Report will vary according to the type of CA taken. In general, your report should include those items listed below, and any additional information necessary to document the CA completed. For information contained in previous correspondence, you may reference that correspondence, unless the CA were different than those approved or the approved CA included using a field analytical method to determine the extent of contamination. All Corrective Action Reports should have map(s) and/or figure(s) which identify all the significant features of the CA.

The Corrective Action Report should include the following items, where applicable:

- Date(s) and summary of the CA performed;
- Date(s) of approved work plans and detailed explanation of variations and/or modifications from approved CA;
- Methods and procedures followed;
- Discussion of any groundwater encountered during excavation, including depth encountered;
- Discussion of any staining, free product or odors encountered during excavation;
- Total volume (in cubic yards) of soil removed and/or treated for each area where CA were completed;
- Description of the amount and type(s) of material disposed off-site and the disposal location(s);
- Acres and location used for land application, date completed, any reported damage to crop or field, applicator's name and license number, and a copy of the signed land application summary;
- Description of the source(s) and type(s) of backfill material used to restore the site;
- Discussion of cleanup goals versus analytical results;
- Locations, volume and concentrations of any residual contamination;
- Recommendations for additional CA needed;
- Discussion of difficulties encountered during implementation that reduced or altered the effectiveness of the CA;
- Expected time remaining to achieve cleanup goals;
- Summary of ongoing or recommended institutional controls (i.e., well advisories, deed restrictions, etc.) or monitoring;

- Groundwater treatment, pumping and treatment rates, total volumes pumped or treated and amount of contaminant(s) removed;
- For mechanical systems, an "As Built" report summarizing the final specifications of system installation.
- The following figures should be included:
 - Site map(s) showing the area(s) remediated (include legend, area identifier, scale, and north arrow);
 - Figures showing dimensions, including depth, of each soil excavation; and
 - Figures showing locations of all sidewall and base of excavation soil samples collected from each excavation.
- The following tables should be included:
 - Tables summarizing analytical results for all soil, water and other samples analyzed as part of the CA. The tables should include the location and depth of each sample as applicable;
 - Tables summarizing treatment results for environmental media treated in a biopile, land treatment unit, or some other approach implemented during the CA; and
 - Tables summarizing analytical results for all other samples associated with the CA;
- Include the following documents as appendices:
 - Reports of analysis for samples collected during CA implementation;
 - Copies of immunoassay printouts with charts; and
 - Hazardous waste manifests and/or solid waste disposal receipts from off-site disposal locations.