

Reporting Forms

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**Petroleum Remediation Program
Consultants Day
September 25, 2008**



Minnesota
Pollution
Control
Agency

Presentation Outline

- Summary of GD 4-06 *Investigation Report Form* changes
- Summary of GD 4-08 *Monitoring Report* changes
- Site Conceptual Model (NEW)

Investigation Report Form

Guidance Document 4-06

- Basically same questions, just restructured
- Not asking for more information
- Added three new tables
 - Surface water receptors
 - Free product recovery
 - Buried utilities
- Expanded appendices section

Investigation Report Form

Guidance Document 4-06

- Emergency and High Priority Sites
- Section 1: Site Assessment
- Section 2: Risk Assessment
- Section 3: Site Management Decision
- Section 4: Figures
- Section 5: Tables
- Section 6: Appendices

Investigation Report Form

Guidance Document 4-06

Section 1: Site Assessment

- Site and Release Information
- **Site-Specific Geology and Hydrogeology (NEW)**
- Extent and Magnitude of Soil Contamination
- Aquifer Determination (LSI)

Investigation Report Form

Guidance Document 4-06

Section 1: Site Assessment

- Aquifer Characterization (RI)
- Extent and Magnitude of Ground Water Contamination
- Natural Attenuation
- **Extent and Recovery of Free Product (NEW)**

Investigation Report Form

Guidance Document 4-06

Section 2: Risk Assessment

- Well Receptors
- Surface Water Receptors
- Utilities and Subsurface Structures
- Vapor Intrusion Receptors
- **Site Conceptual Model Discussion (NEW)**

Monitoring Report

Guidance Document 4-08

- Reorganized to follow Guidance Document 4-06
- Account for more than current Annual Monitoring Report
- More flexible
 - New sections
 - Expanded figures section
 - Expanded tables section
 - Expanded appendices section

Monitoring Report

Guidance Document 4-08

- Section 1: Work Completed
- Section 2: Monitoring Results
- Section 3: Site Management Decision
- Section 4: Figures
- Section 5: Tables
- Section 6: Appendices

Monitoring Report

Guidance Document 4-08

Section 2: Monitoring Results

- Ground Water
- Field-Detectable Vapors
- Vapor Intrusion
- Free Product
- Other (surface water, surface soil, additional subsurface investigation)
- Site Conceptual Model changes

Site Conceptual Model

A Site Conceptual Model provides the framework for evaluating site-specific risk scenarios that site management decisions are based upon.

Incorporates data from the previous sections into a concise narrative that provides rationale for the Site Management Decision.

Site Conceptual Model

- Guidance Document 4-06 reorganized to facilitate development of the Site Conceptual Model
 - Site-specific geology and hydrogeology
 - Contaminant distribution
 - Receptors and exposure pathways
 - Site management decision

Site Conceptual Model

“For example, integration of a site’s geology, contaminant distribution, and receptor data will determine if an aquifer is present, if the aquifer is impacted or threatened, and if nearby water wells are screened within the aquifer. All of these factors will help determine whether the site should be managed under a low-risk or high-risk aquifer scenario.”

Guidance Document 1-01 *Petroleum Remediation Program General Policy*

Site Conceptual Model

Guidance Document 4-06

2.19 Provide a detailed site conceptual model (SCM). The SCM should integrate site-specific geology, hydrogeology, and the contaminant distribution with respect to identified exposure pathways (well receptors, surface water receptors, utilities and subsurface receptors, and vapor intrusion receptors).

Site Conceptual Model

Guidance Document 4-08

2.6 Site Conceptual Model

Discuss any changes to the overall site conceptual model that has altered the current site management decision based upon the information presented in this report.

In Summary ...

- GD 4-06 *Investigation Report Form* reorganized for SCM development
- GD 4-08 *Monitoring Report* changed to be more inclusive and flexible
- Site Conceptual Model – put it all into perspective