

How to use ADEM's Natural Attenuation Monitoring Report Forms (NAMR forms)

This Excel Workbook contains the 9 sections of the Natural Attenuation Monitoring Report (NAMR) forms. Nine (9) sections are contained in eight (8) forms. Sections two (2) and three (3) are included on the same form. Sections containing tables may be copied as needed for additional space to enter the required information.

Section 1 - Site Summary

Section 2 - Site Maps

Section 3 - Well Inventory Table

Section 4 - History of Sampling

Section 5 - Sampling Methodology

Section 6 - Historical Monitoring Well Chemicals of concern Data

Section 7 - Historical Monitoring Well Intrinsic Groundwater Data

Section 8 - Groundwater Elevation Data

Section 9 - Monitoring Costs v. Time

Instructions On Completing the Sections

Section 1 - Site Summary

Indicate the purpose of the monitoring activities and the site status with respect to the stage of assessment and/or corrective action activities. Indicate the number and type of both groundwater monitoring wells and other water supply wells. *The status of purge water generated from monitoring activities should be documented. Disposal documentation should be attached. Attach a brief summary of the ARBCA evaluation including a table summarizing the SSTI's developed for the site.*

Section 2 - Site Maps

Attach site maps showing all well locations, location of former and/or current UST system(s), receptors, utilities, current and future land use of site and adjacent area within a 500-foot radius, adjacent properties, buildings, point of exposure and point of compliance, north arrow, etc.

Section 3 - Well Inventory Table

Provide a complete listing of all wells at the site. Groundwater monitoring and water supply well information including installation date, diameter, and screened interval (e.g. 15 feet to 25 feet) should be included. Use of any water supply wells should also be indicated. The table should be duplicated if there is insufficient space for the existing wells.

Section 4 - History of Sampling

This section should indicate the parameters which have been sampled historically at the site. Check appropriate boxes indicating sampling parameters for the date sampled. The person(s) collecting the samples, their title and company name should be included. This form should reflect the history of sampling of the site.

Section 5 - Sampling Methodology

The sampling methodology is presented in this section. Analytical method numbers for laboratory methods should be entered in the appropriate boxes. Where field methods are used, 'field' should be entered under the parameter box. Additional pages describing the field methods in detail should be attached. Person(s) sampling, their title and company should also be included. Attachments to this section include Chain of Custody's and original laboratory data sheets for the current event.

Section 6 - Historical Monitoring Well Chemicals of Concern Data

Historical results from groundwater monitoring events should be provided in tabular and graphic form. *This section should be duplicated for each monitoring well.* This section is only for chemical of concern data. As many as nine (9) individual chemicals of concern may be summarized for a single well. The form is preformatted to graph the data. Replace the sample data with actual site data and the graph will automatically be modified. *Attachments should include site maps illustrating the distribution of all groundwater chemical of concern data. Maps for the most recent three (3) monitoring events should be included.*

Section 7 - Historical Monitoring Well Intrinsic Groundwater Data

Historical intrinsic groundwater data should be provided here. The section should be duplicated for each monitoring well. Only intrinsic groundwater data should be reported in this section. The form is preformatted to graph the data, however, only parameters with the same units have been preformatted including dissolved oxygen, nitrate, iron 2+ and sulfate. Graphical presentation of the intrinsic data is not required, but graphs illustrating relevant trends in intrinsic data may be helpful in data interpretation. *Site maps illustrating the distribution of all relevant intrinsic groundwater data for the last three (3) monitoring events should be included.*

Section 8 - Groundwater Elevation Data

Groundwater elevation data for all wells should be compiled in this section. The form has been preformatted to automatically graph the data. Replace the sample data with actual site data. When graphing, do not place so many wells on the graph that it becomes illegible. Additional graphs may be established for sites with more than an average number of wells. *Attach the three (3) most recent groundwater elevation maps indicating the direction of groundwater flow. Groundwater elevation data must be corrected for free product if necessary. Attach a table including the surveyed top of casing, depth to water and depth to free product.*

Section 9 - Monitoring Costs v. Time

This section is only required for sites eligible for Alabama Tank Trust Fund coverage. All site cost data may be included with an indication when the monitoring costs began to be incurred. A table and graph of the cost over time should be presented.

NATURAL ATTENUATION MONITORING REPORT

Facility Name:
Facility I. D. No.:
Incident No.:
Consulting Firm:

Year:
Quarter:
Reporting Period:
Project Manager:

Section 1 - Site Summary

Purpose of Monitoring:

- Plume Characterization
- Confirmation Monitoring
- Remediation by Natural Attenuation
(Approved Corrective Action Plan)

Site Status:

- Assessment Complete
- ARBCA Evaluation Conducted
- Active UST's
- Site Classification
- Free Product ever present

Number of Groundwater Monitoring Wells:

- Piezometers
- Type II
- Type III
- Other

Number of Water Supply Wells:

- Public (within 1 mile radius of site)
- Private (within 1000 foot radius of site)
- Other (Explain) _____

Status of Waste Water Disposal:

- | | |
|---|---|
| <input type="checkbox"/> Quantity (gallons) | <input type="checkbox"/> Disposal Method |
| <input type="checkbox"/> Stored On-site | <input type="checkbox"/> Disposal Documentation |

Comments:

ATTACH A BRIEF SUMMARY OF THE ARBCA EVALUATION INCLUDING THE SSTLs DEVELOPED FOR THE SITE AND THE LOCATION OF THE POINT OF COMPLIANCE.

NATURAL ATTENUATION MONITORING REPORT

Facility Name:
Facility I. D. No.:
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Year:
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Project Manager:

Section 2 - Site Maps

Attach site map(s) illustrating all well locations, location of former and/or current UST system(s), utilities, adjacent properties, receptors, current and most likely future land use of site and adjacent properties, Point of Compliance, buildings and other pertinent features. All maps should contain a north arrow and should be to scale.

Section 3 - Well Inventory Tables

Monitoring Wells					
Well ID	Date Installed	Diameter (inches)	Screened Interval (feet bgs)		Depth to Water (feet bgs)

Water Supply Wells						
Well ID	Date Installed	Diameter (inches)	Screened Interval (feet bgs)		Depth to Water (feet bgs)	Well Use

NATURAL ATTENUATION MONITORING REPORT

Facility Name:
Facility I. D. No.:
Incident No.:
Consulting Firm:

Year:
Quarter:
Reporting Period:
Project Manager:

Section 9 - Monitoring Costs v. Time

Date										
O & M										
Cumulative	0	0	0	0	0	0	0	0	0	0

