

CONSULTANTS' DAY 2015

20th Anniversary

DNR's
Remediation
& Redevelopment
Program

Site Closure Tips and Concerns

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Hosted by DNR's
Remediation & Redevelopment Program



Key Points



Best results = Complete submittal

- Call the PM with questions first
- Answer all questions - thoroughly
- Submit all required maps/figures/tables
- Identify all continuing obligations
- Use current RCL's
- Show cumulative impacts



NR 726 Closure Submittals



Explain WHY a question is not relevant to your case

- Do NOT use 'Not Applicable'



NR 726 Closure Submittals



Incomplete site investigations

- Define extent for all media
- Include complete history
- Assess vapor intrusion
- Sample in upper 4 feet for DC
- 8 quarterly groundwater samples



NR 726 Closure Submittals



- Sample results on maps
- Property boundaries on maps
- Document COs with photos
- Data tables must be legible
 - use multiple tables
- Isoconcentration lines



NR 726 Closure Submittals



- GIS Registry Documentation
 - P. 5/Table 5: Identify all residual contamination and continuing obligations options
 - Attachments A-C always apply, D-G required if COs applied
 - If NA, explain why not included



NR 726 Closure Submittals

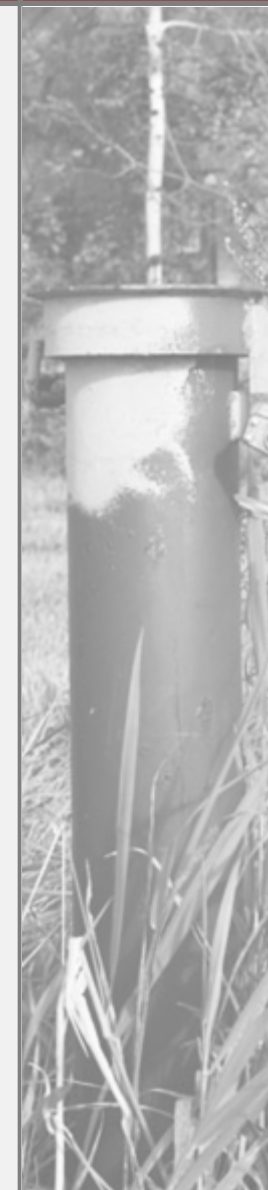


5. Continuing Obligations: Situations where sites, including all affected properties and rights-of-way (ROWs), are included on the DNR's GIS Registry. In certain situations, maintenance plans are also required, and must be included in Attachment D.

Directions: For each of the 3 property types below, check all situations that apply to this closure request.

(NOTE: Monitoring wells to be transferred to another site are addressed in Attachment E.)

This situation applies to the following property or Right of Way (ROW):			Case Closure Situation - Continuing Obligation Inclusion on the GIS Registry is Required (ii. - xiv.)	Maintenance Plan Required	
Property Type:					
Source Property	Affected Property (Off-Source)	ROW			
i.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None of the following situations apply to this case closure request.	NA
ii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual groundwater contamination exceeds ch. NR 140 ESs.	NA
iii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination exceeds ch. NR 720 RCLs.	NA
iv.				Monitoring Wells Remain:	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Not Abandoned (filled and sealed)	NA
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	• Continued Monitoring (requested or required)	Yes
v.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) direct contact pathways (includes vapor barriers)	Yes
vi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cover/Barrier/Engineered Cover or Control for (soil) groundwater infiltration pathway	Yes
vii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Structural Impediment: impedes completion of investigation or remedial action (not as a performance standard cover)	NA
viii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Residual soil contamination meets NR 720 industrial soil RCLs, land use is classified as industrial	NA
ix.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor Mitigation System (VMS) required due to exceedances of vapor risk screening levels or other health based concern	Yes
x.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Dewatering System needed for VMS to work effectively	Yes
xi.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Compounds of Concern in use: full vapor assessment could not be completed	NA
xii.	<input type="checkbox"/>	<input type="checkbox"/>	NA	Vapor: Commercial/industrial exposure assumptions used.	NA
xiii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vapor: Residual volatile contamination poses future risk of vapor intrusion	NA
xiv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Site-specific situation: (e. g., fencing, methane monitoring, other) (discuss with project manager before submitting the closure request)	Site specific



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Industrial Soil Standards

- To apply this CO, the industrial soil standard must be met, not exceeded
- Land use must be industrial
- Document Industrial zoning



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Structural Impediments

- Structure prevented completion of investigation or remedial action
- Is different from a building acting as a cover



NR 726 Closure Submittals



- Document efforts taken to locate monitoring wells
- Include:
 - well construction logs
 - well location map
 - deed for each property



NR 726 Closure Submittals

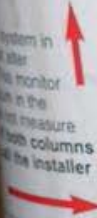


- Maintenance Plan (p. 5, p. 7)
 - Add the site specific information to the template
 - Form 4400-305 inspection log
 - Include photographs (baseline)
 - Simple plan for MWs



MONITOR

...system in
...after
...this monitor
...in the
...measure
...both columns
...the installer



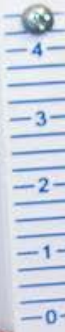
...ing is
...EPA
...non-toxic.

...LAWELL, IN 46032

...COMPONENT OF A
...SYSTEM.
...DISCONNECT!



Antech
...FLORIDA



System Monitor



NR 726 Closure Submittals



NR 725 notification letters

- Residual contamination
- Continuing obligations
- DRAFT guidance for vapor COs



NR 726 Closure Submittals



Parties receiving NR 725 notifications

- Source property owner
- Off-source Property owners
- ROW holders
- Occupants, as appropriate

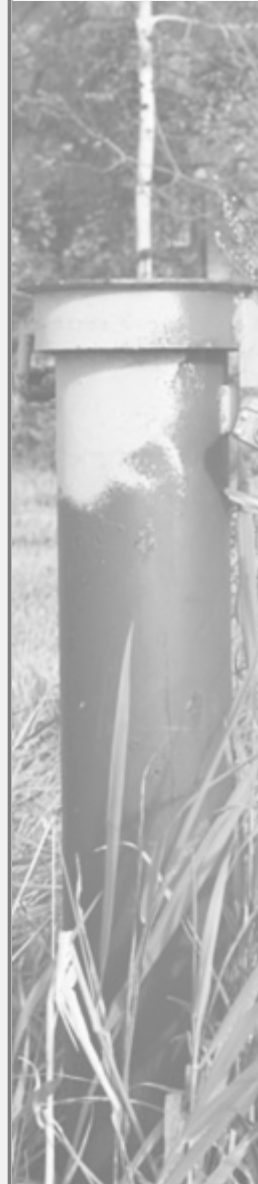


NR 726 Closure Submittals



Continuing Obligations-notification required:

- Groundwater meets or exceeds ES
- Soil meets or exceeds RCLs
- Monitoring Well abandonment
- Cover or barrier
- Structural Impediment
- Industrial RCLs applied
- Site Specific Condition



NR 726 Closure Submittals



Vapor COs: notification required

- Vapor Mitigation System required
- Dewatering system needed for VMS
- Compounds of Concern in use – future use limited to current operations
- Commercial/Industrial exposure assumptions used (property use limited)
- Residual volatile contamination poses risk for future construction



NR 726 Closure Submittals



Signatures and Findings for Closure Determination

- See the pop-up boxes for a determination of whether a hydrogeologist and/or engineer signature is needed



NR 726 Closure Submittals



- First Box Pop-up:

If a response action addresses groundwater contamination, the closure request must be prepared by a professional engineer and a hydrogeologist, and must include both signatures.



NR 726 Closure Submittals



CDs: submit one initial, one final

- submit a final CD after all changes have been made
- organize the file consistent with the closure form format
- final CD/paper copy must match



NR 726 Closure Submittals



- CD Labeling

Files Currently on the Disc (8)

- Attachment A - Data Tables
- Attachment B - Maps and Figures
- Attachment C - Documentation of Reme...
- Attachment D - Maintenance Plan(s)
- Attachment E - Monitoring Well Informa...
- Attachment F - Notifications to Owners ...
- Attachment G - Source Legal Documents
- Case Closure - GIS Registry Form

Files Currently on the Disc (13)

- Attachment B - cover page
- Figure B.1.a - Site Location Map
- Figure B.1.b - Detailed Site Map
- Figure B.1.c - RR Site Map
- Figure B.2.a - Pre-remedial Soil Contami...
- Figure B.2.b - Post-remedial Soil Contam...
- Figure B.2.c - Pre-Post Remaining Soil Co...
- Figure B.3.a - Geologic Cross-Section Fig...
- Figure B.3.b - Groundwater Isoconcentrat...
- Figure B.3.c - Groundwater Flow Directio...
- Figure B.3.d - Monitoring Wells
- Figure B.4.a - Vapor Intrusion Map
- Figure B.4.b - Other media of concern (e...



NR 726 Closure Submittals



“Flatten” big files/reduce size

_B.1.b Detailed Site Map.pdf	02/24/2015 9:49 AM	Adobe Acrobat D...	953 KB
_B.1.c RR Site Map.pdf	02/24/2015 9:50 AM	Adobe Acrobat D...	138 KB
_B.2.b PostRemedial Soil Contamination....	02/24/2015 9:52 AM	Adobe Acrobat D...	855 KB
_B.2.c PrePost Remedial Soil Contaminati...	02/24/2015 9:52 AM	Adobe Acrobat D...	910 KB
_B.3.a.i Geologic Cross Section Location ...	02/24/2015 9:51 AM	Adobe Acrobat D...	907 KB
Att B Cov.pdf	10/02/2014 10:58 ...	Adobe Acrobat D...	67 KB
B.1.a Site Location Map.pdf	10/02/2014 10:29 ...	Adobe Acrobat D...	171 KB
B.1.b Detailed Site Map.pdf	12/17/2014 4:25 PM	Adobe Acrobat D...	1,875 KB
B.1.c RR Site Map.pdf	12/17/2014 4:28 PM	Adobe Acrobat D...	8,010 KB
B.2.a Pre Remedial Soil Contamination.pdf	12/17/2014 4:29 PM	Adobe Acrobat D...	1,302 KB
B.2.b PostRemedial Soil Contamination.p...	12/17/2014 4:31 PM	Adobe Acrobat D...	1,304 KB
B.2.c PrePost Remedial Soil Contaminati...	12/17/2014 4:34 PM	Adobe Acrobat D...	1,306 KB
B.3.a Geologic Cross Section.pdf	12/18/2014 3:13 PM	Adobe Acrobat D...	158 KB
B.3.a.i Geologic Cross Section Location ...	12/18/2014 2:06 PM	Adobe Acrobat D...	1,350 KB



Summary of Key Points



Best results = Complete submittal

- Complete the site investigation
- Answer all questions
- Provide clear and complete maps and figures
- Identify all continuing obligations
- Talk to the PM.
- Read the directions.



Questions & Contacts



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For site specific questions, contact
the DNR Project Manager.

