

**Table 1**  
**Examples of State Environmental Screening Criteria for**  
**Groundwater Remediation Activities**  
**Petroleum Environmental Cleanups in Wisconsin**

State Regulatory Authority	Citation	Groundwater Remediation Criteria
California Regional Water Quality Control Board (CRWQCB) - North Coast Region	CRWQCB Interim Guidance on Petroleum Hydrocarbons Cleanups, 12/8/95	<ul style="list-style-type: none"> <li>• <b>Low-Risk Groundwater Criteria:</b> LUFT sites are to be designated as low-risk groundwater case requiring no active remediation if DTW <math>\leq</math> 50 ft and no drinking water well is screened within the affected water-bearing unit within 250 ft of leak source.</li> </ul>
California State Water Resources Control Board (CSWRCB)	CSWRCB Draft Resolution 1021b, 11/15/96	<ul style="list-style-type: none"> <li>• <b>Low-Risk Groundwater Criteria:</b> LUFT sites are to be designated as low-risk groundwater case if benzene concentration <math>\leq</math> 1 ppm and no surface water discharge or drinking water well within 750 ft of leak source.</li> </ul>
Iowa Department of Natural Resources (DNR)	Title X, Iowa Administrative Code, 567-135.2 (455B)	<ul style="list-style-type: none"> <li>• <b>Groundwater Exposure Pathway Screening:</b> Groundwater ingestion pathway applies if there is an existing water supply well within 1000 ft of source or if affected unit meets definition of "protected groundwater resource" (i.e., hydraulic conductivity <math>&gt;</math> 0.44 m/day, TDS <math>&lt;</math> 2500 mg/L).</li> </ul>
Illinois Environmental Protection Agency (IEPA)	35 IAC 620.450(4)(B)  35 IAC 742.320	<ul style="list-style-type: none"> <li>• <b>Alternate Risk-Based Groundwater Standards:</b> Site may be closed with exceedance of state water quality criteria if beneficial use of groundwater is protected to extent practicable and threat to public health or environment is minimized.</li> <li>• <b>Groundwater Exposure Pathway Screening:</b> Potable groundwater exposure pathway may be eliminated from further consideration if NAPL removed to extent practicable, no groundwater impacts likely within setback zone of potable water supply, no impacts likely to surface water, and groundwater use prohibited by government ordinance within 2500 ft of source of release.</li> </ul>

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 NAPL = Non-aqueous phase liquid      NFA = No further action      SW = Surface water

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Massachusetts Department of Environmental Protection (MDEP)	310 CMR 40.0000, Massachusetts Contingency Plan	<p><b>GW Classification and Pathway Screening:</b> Groundwater classified by one or more of 3 categories.</p> <ul style="list-style-type: none"> <li>• <u>GW-1:</u> Current or future drinking water source.</li> <li>• <u>GW-2:</u> Shallow plume (&lt; 15 ft) within 30 ft of occupied building, posing indoor air concern.</li> <li>• <u>GW-3:</u> Groundwater potentially discharging to SW (applies to all sites).</li> </ul> <p>For GW-1, potential drinking water resource defined based on proximity to water supply well or distribution system (500 ft) or classification as Potentially Productive Aquifer (PPA). PPA is a unit classified as a high or medium yield aquifer by U.S.G.S. or a specific coastal aquifer. GW-1 category does not apply to Non-Potential Drinking Water Source Areas (NPDWSA), which are areas of 100 acres or more, located in municipalities with population density <math>\geq</math> 4400 persons per square mile with industrial, commercial, dense residential, or otherwise urban development.</p>
State Regulatory Authority Michigan Department of Environmental Quality (MDEQ)	Citation MDEQ Operational Memorandum No. 11, 8/25/97	<p style="text-align: center;"><b>Groundwater Remediation Criteria</b></p> <ul style="list-style-type: none"> <li>• <b>Groundwater Exposure Pathway Screening:</b> Potable groundwater exposure pathway may be eliminated from further consideration if i) groundwater formation yields insufficient water (as determined by one of several criteria), ii) affected water-bearing unit is not in communication with lower adjacent aquifer, iii) site conditions have been documented in a site investigation and closure reports, and iv) monitoring wells used in study have been properly constructed and developed.</li> </ul>
Minnesota Pollution Control Agency (MPCA)	MPCA LUST Investigation and Cleanup Policy, Fact Sheet 3.1, April 1996	<ul style="list-style-type: none"> <li>• <b>GW Exposure Pathway Screening and Remediation Methods:</b> Groundwater aquifers are classified as "resource aquifers" (serving as only viable water service in area or producing at least 5 gpm per well and meeting minimum thickness requirements) and "non-aqueous aquifers" (which do not meet these criteria). For non-resource aquifers or "soils-only" impacts, no active groundwater remediation is needed, unless necessary to protect a resource aquifer. For resource aquifers, stable groundwater plumes less than 200 ft in length are eligible for immediate case closure. For all other plumes in resource aquifers, point of drinking water standards application is to be 200 ft from source. (MPCA data shows that 80% of groundwater plumes at LUST sites are less than 200 ft long.)</li> </ul>

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Texas Natural Resource Conservation Commission (TNRCC)	TNRCC Petroleum Storage Tank (PST) Division, Interoffice Memorandum, 2/10/97	<p><b>GW Exposure Pathway Screening:</b> Groundwater pathway may be excluded from further consideration if NAPL has been recovered to extent practicable, there are no existing impacts to water supply wells or surface water in excess of applicable limits, and the following conditions are met:</p> <ul style="list-style-type: none"> <li>• <u>For GW Plumes Delineated to Drinking Water Limits:</u> If no future groundwater use anticipated in plume area and maximum plume concentration &lt; Class III ground-water limits (e.g., benzene <math>\leq</math> 0.14 mg/L), NFA for groundwater. Otherwise, show plume stable, and then NFA.</li> <li>• <u>For GW Plumes Not Delineated to Drinking Water Limits:</u> If no existing water supply wells or surface water discharge within 1200 ft and no anticipated use within 1200 ft, NFA for GW if maximum plume concentrations &lt; Class III limits (e.g., benzene <math>\leq</math> 0.14 mg/L). If Class III limits exceeded, show plume stable and then NFA.</li> </ul>
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Table 1  
 Summary of Key Program Management Issues for Petroleum Storage Tank Sites  
 Petroleum Environmental Cleanups in Wisconsin

Remedial Action Cost Driver	Recommended Risk Management Strategy
<p><b>1) Groundwater Cleanup Requirements</b>                      Current Wisconsin laws and regulations require remediation of non-usable groundwater per drinking water standards, involving significant expense with no tangible public health benefit.</p>	<ul style="list-style-type: none"> <li><b>Response Action:</b> Amend relevant statutes and/or rules to i) apply drinking water standards to usable groundwater only, ii) establish point of standards application for drinking water resources that corresponds to reasonable well location, and iii) define practical protective measures (explosion, utility damage) for impacted non-usable groundwater [Wisconsin Statutes, Chapter 160, Wisconsin Admin. Code, NR 140].</li> </ul>
<p><b>2) Groundwater Remediation by Natural Attenuation</b>                      For leaking petroleum storage tank sites, groundwater remediation by natural attenuation represents a technically effective and economical risk management option for leaking tank sites. However, practical application of this option is severely limited by the regulatory requirement that a <i>groundwater use restriction</i> be enforced in all cases, regardless of groundwater usability or presence of municipal water supply.</p>	<ul style="list-style-type: none"> <li><b>Response Action:</b> Amend existing rules to establish simple <i>exit criteria</i> for case closure by natural attenuation based on consideration of plume concentrations and proximity of actively used drinking water supply wells. Delete requirement for groundwater use restriction where affected groundwater is either unusable or unused with other water supply available. [Wisconsin Admin. Code, NR 726].</li> <li><b>Benefits:</b> Increased, appropriate use of groundwater remediation by natural attenuation, significantly reducing remedial action costs.</li> </ul>
<p><b>3) Soil Cleanup Requirements</b>                      Soil cleanups are required if petroleum concentrations in soil exceed Residual Contaminant Levels (RCLs), based on protection of human direct contact or underlying groundwater quality. However, direct contact RCLs are not site-specific, triggering unnecessary remedial actions in some cases. Also, procedures for derivation of site-specific groundwater protection RCLs are not well defined, entailing unnecessary expense and delay.</p>	<ul style="list-style-type: none"> <li><b>Response Action:</b> Amend existing rules to allow derivation of truly site-specific RCLs in all cases. Provide detailed technical guidance on appropriate calculation methods and modeling procedures. [Wisconsin Admin. Code, NR 720].</li> <li><b>Benefits:</b> Development of appropriate and protective soil cleanup standards, reducing both site engineering and cleanup costs.</li> </ul>
<p><b>4) Program Administration</b>                      Efficiency and consistency of tank cleanup program management could benefit from training of state agency staff, regulated community, and environmental consultants regarding key policy issues and technical procedures.</p>	<ul style="list-style-type: none"> <li><b>Response Action:</b> Complete Wisconsin regulatory guide currently under development by DNR with support from PIRL. Conduct training/outreach program regarding regulatory policies and procedures and key technical issues (e.g., use of RNA, calculation of RCLs, etc.).</li> </ul>
<p><b>5) Site Prioritization</b>                      Current LUST site classification system does not adequately prioritize sites per immediacy and magnitude of risk. Remedial actions should be based on risk not concentration limits (ES or PAL).</p>	<ul style="list-style-type: none"> <li><b>Response Action:</b> Revise current high/med/low priority system to classify sites by immediacy and magnitude of impact. Consider use of COMM prioritization system. Reserve detailed technical review for near-term, high-impact sites. [Wisconsin Admin. Code NR 710.07].</li> </ul>

**NOTE:** Table summarizes possible measures for more cost-effective management of soil and groundwater cleanup efforts at leaking petroleum storage tank sites in Wisconsin. More complete discussion of each issue is provided in body of attached technical paper.

**Table 2**  
**Response to DNR Comments on Key Program Management Issues**  
**Petroleum Environmental Cleanups in Wisconsin**

Remedial Action Cost Driver and Recommended Action	Summary of DNR Comment (10/22/98)	Response to DNR Comment
<p><b>1) Groundwater Cleanup Requirements</b>  <i>Recommended Action:</i> To achieve over 50% reduction in groundwater remediation costs while preserving health/ environmental protection, amend relevant statutes and/or regulations to require application of drinking water standards to usable groundwater only.</p>	<p>Suggested approach would require extensive mapping of potable sources, at great expense of time and money. Current natural attenuation option allows closure above ES, achieving same goal as your suggestion.</p>	<p>Mapping is not necessary. Usable and non-usable groundwater can be identified on site-specific basis using simple criteria, as done in IA, TX, IL. Natural attenuation option does not achieve same goal because it requires expensive and time-consuming investigation of sites with non-usable water.</p>
<p><b>2) Groundwater Remediation by Natural Attenuation</b>  <i>Recommended Action:</i> Enhance appropriate use of groundwater RNA remedies by establishing suitable exit criteria for groundwater impact concerns and removing requirement for groundwater use restriction.</p>	<p>Development of "exit criteria" would entail lengthy statutory and administrative process. Groundwater use restriction is not PECFA cost. Property "taint" associated with deed notice is a problem but is not a PECFA concern.</p>	<p>Comparable "exit criteria" were developed and implemented in Texas and by L.A. Water Quality Control Board in less than 90 days. Ground-water use restrictions are unnecessary at sites where shallow groundwater is unused and/or unusable or if use is prohibited by ordinance. Property "taint" drives PECFA costs by discouraging use of natural attenuation option.</p>
<p><b>3) Soil Cleanup Requirements</b>  <i>Recommended Action:</i> To provide appropriate and protective soil cleanup standards and reduce associated costs, amend existing regulations to allow for truly site-specific derivation of both direct contact and ground-water protection RCLs and issue guidance regarding appropriate calculation procedures.</p>	<p>RCLs are different for industrial vs. residential sites. Also, soil performance standards can be implemented on site-specific basis as alternative to numeric standard. Guidance has already been issued for both numeric RCLs and soil performance standards.</p>	<p>Direct contact RCLs are the same for all industrial sites regardless of site conditions and, in this regard, are not truly "site-specific". The option for a soil performance standard may be useful in some cases. However, the need for a soil response action (i.e., either cleanup to an RCL or application of a soil performance standard) is triggered by exceedance of an RCL. If the RCL were evaluated on a truly site-specific basis, fewer unnecessary response actions would be triggered.</p>
<p><b>4) Program Administration</b>  <i>Recommended Action:</i> Complete the draft DNR regulatory guide and issue in conjunction with training program for regulatory agency staff, regulated community, and consultants. Also provide training workshops on key technical issues (e.g., RNA demonstration procedures, site-specific RCL calculations, etc.).</p>	<p>DNR agrees.</p>	<p>-----</p>
<p><b>5) Site Prioritization</b>  <i>Recommended Action:</i> Revise current high/med/low priority system to classify sites by immediacy and magnitude of impact. Consider use of COMM prioritization system. Reserve detailed technical review for near-term, high-impact sites.</p>	<p>(No comment yet. This issue was not included in PIRI paper of 9/8/98, but was identified by tank owners in 9/16/98 legislative hearing.)</p>	<p>-----</p>



Table 3A  
 Regulatory Cross-References and Possible  
 Amendments for Key Program Management Issues  
 Petroleum Environmental Cleanups in Wisconsin

Remedial Action Cost Driver/ Recommended Action	Regulatory References	Possible Amendment
<p><b>1) Groundwater Cleanup Requirements</b>                      Amend relevant statutes and/or rules to i) apply drinking water standards to usable groundwater only, ii) establish point of standards application for drinking water resources that corresponds to reasonable well location, and iii) define practical protective measures (explosion, utility damage) for impacted non-usable groundwater [Wisconsin Statutes, Chapter 160; Wisconsin Admin. Code, NR 140].</p>	<ul style="list-style-type: none"> <li>• WI Stats. 160.01(4): Statutory definition of "Groundwater"</li> <li>• NR 140.05(9): Regulatory definition of "Groundwater"</li> <li>• WI Stats. 144.01(19): Statutory definition of "Waters of the State"</li> <li>• WI Stats. 160.07: Establishment of Enforcement Standards; substances of public health concern</li> <li>• WI Stats. 160.15: Establishment of Preventive Action Limits (PALs).</li> <li>• WI Stats. 160.21: Point of Standards Application.</li> </ul>	<p>Revise or amend to establish subcategories of usable vs. nonusable groundwater based on considerations of water quality (e.g., TDS) and sustainable well yield (gpd). <i>Examples: Michigan, Iowa, Minnesota, Texas.)</i></p> <p>Revise or amend to establish subcategories of usable vs. nonusable groundwater based on considerations of water quality (e.g., TDS) and sustainable well yield (gpd). Consider feasibility of amending NR 140 rules without revising WI Stats Chp. 160. <i>Examples: Michigan, Iowa, Minnesota, Texas.)</i></p> <p>No modification necessary.</p> <p>Revise to note that enforcement standards (ES) established for "pure drinking water" will apply only to groundwater determined to be usable as drinking water resource. For non-drinking water exposure pathways (e.g., explosive hazard, utilities, etc.), develop appropriate protective limits other than ES values.</p> <p>Revise to note that PALs, which, like ES values, were established for protection of drinking water, will apply only to groundwater determined to be usable as a drinking water resource. Also clarify that PAL applies at same point of standards application as ES values.</p> <p>Amend 160.21(2) to specify that point of standards application for drinking water use be established as either i) a point of present ground-water use; ii) the nearest potential off-site downgradient point of ground-water use; or iii) a design management zone (DMZ) specified for the facility type. Consider revising 160.21(2)(c) and (d) to define DMZ for USTs based on site-specific, risk-based evaluation. For non-drinking water exposure pathways, establish separate point(s) of standards application as needed to prevent impact (e.g., explosive hazard, utilities, etc.).</p>



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Remedial Action Cost Driver/ Recommended Action	Regulatory References	Possible Amendment
<p>1) Groundwater Cleanup Requirements  <i>(cont'd)</i></p>	<ul style="list-style-type: none"> <li>• WI Stats 160.23: Response to PAL Exceedance</li> <li>• WI Stats 160.25: Response to ES Exceedance</li> <li>• NR 140.01: Purpose</li> <li>• NR 140.10: Public health related groundwater standards</li> <li>• NR 140.12: Public welfare related groundwater standards</li> <li>• NR 140.22: Point of Standards Application</li> <li>• NR 140.28: Exemptions</li> </ul>	<p>Add statement noting that no response action is required if site-specific risk-based analysis indicates that the site condition is not likely to pose a human health risk in excess of acceptable levels.</p> <p>Add statement noting that no response action is required if site-specific risk-based analysis indicates that the site condition poses no human health risk in excess of acceptable levels.</p> <p>Clarify that purpose of rule is to establish groundwater quality standards for substances entering a groundwater unit which is potentially usable as a drinking water resource.</p> <p>Amend to note that these groundwater quality standards apply only to groundwater determined to be usable as drinking water resource.</p> <p>Amend to note that these groundwater quality standards apply only to groundwater determined to be usable as drinking water resource.</p> <p>Revise text as described for WI Stats. 160.21 above. For UST site, allow DMZ to be established based on site-specific, risk-based evaluation. Delete NR 140.22(2)(c), which specifies that, if no DMZ defined for facility, point of standards application is any point at which groundwater is monitored.</p> <p>Add exemption for ES or and PAL exceedance if site-specific risk-based evaluation indicates that site condition poses no human health risks above acceptable levels.</p>



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<p><b>2) Groundwater Remediation by Natural Attenuation</b></p> <p>Amend existing rules to establish simple exit criteria for case closure by natural attenuation based on consideration of plume concentrations and proximity of actively used drinking water supply wells. Delete requirement for groundwater use restriction where affected groundwater is either unusable or unused with other water supply available. [Wisconsin Admin. Code, NR 726].</p>	<ul style="list-style-type: none"> <li>• NR 726.05(2)(b)(1)(f): Source Control Requirements</li> <li>• NR 726.05(2)(b)(2): Compliance with NR 140 standards</li> <li>• NR 726.05(2)(b)(3) - (4): Prohibition on PAL or ES exceedance without groundwater use restriction</li> <li>• NR 726.05(2) - (3): Demonstration of Natural Attenuation</li> <li>• NR 726.05(8)(am): Groundwater Use Restriction</li> </ul>	<p>Delete requirement that PAL or ES exceedance be limited to property subject to groundwater use restriction.</p> <p>Revise text to state that compliance be established within "reasonable time period" based on the potential use of the ground-water as a drinking water resource or the anticipated occurrence of other impacts (explosion, utility damage, etc.).</p> <p>Delete requirement for groundwater use restrictions except for sites where affected groundwater is usable and likely to be used and such use is not otherwise prohibited by law.</p> <p>For soil, groundwater, and other affected media, define simple exit criteria under which natural attenuation can safely be assumed to be effective as final remedy (e.g., based on maximum source levels, proximity of well users, etc.). Require detailed demonstration, as described in existing DNR guidance, only for those cases which do not meet simple exit criteria.</p> <p>Revise text to specify that deed notice of groundwater use restriction applies only for cases of ES exceedances where ground-water is usable and likely to be used and such use is not otherwise prohibited by law.</p> <p>Revise text to specify that, for sites underlain by usable ground-water, RCLs will be based on protection of groundwater such that ES values will not be exceeded at site-specific point of standards application. For non-usable groundwater, soil RCLs will be derived so as to prevent groundwater condition contributing to explosive condition, utility impact, or other concern.</p> <p>Adjust default exposure assumptions for consistency with 1997 update to U.S. EPA Reasonable Maximum (RME) factors. Calculate site-specific soil particulate concentration in air and soil-to-air volatilization factors based on actual site soil properties.</p> <p>Delete provision requiring special public notice when soil performance standard is implemented on private property in accordance with NR 720.19(2).</p>
<p><b>3) Soil Cleanup Requirements</b></p> <p>Amend existing rules to allow derivation of truly site-specific RCLs in all cases. Provide detailed technical guidance on appropriate calculation methods and modeling procedures. [Wisconsin Admin. Code, NR 720].</p>	<ul style="list-style-type: none"> <li>• NR 720.19(4)(a): Site-Specific Soil RCLs for Protection of Groundwater</li> <li>• NR 720.19(5)(c): Default Exposure Assumptions for Direct Contact RCLs</li> <li>• NR 714.07(5): Public notice for soil performance standard</li> </ul>	<p>Adjust default exposure assumptions for consistency with 1997 update to U.S. EPA Reasonable Maximum (RME) factors. Calculate site-specific soil particulate concentration in air and soil-to-air volatilization factors based on actual site soil properties.</p> <p>Delete provision requiring special public notice when soil performance standard is implemented on private property in accordance with NR 720.19(2).</p>



**Table 3A**  
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**Amendments for Key Program Management Issues**  
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<p><b>4) Program Administration</b>                      Complete Wisconsin regulatory guide currently under development by DNR with support from PIRI. Conduct training/ outreach program regarding regulatory policies and procedures and key technical issues (e.g., use of RNA, calculation of RCLs, etc.).</p>	<ul style="list-style-type: none"> <li>User's Guide to Wisconsin Remedial Action Rules, DNR Publication No. RR-576-07 (Draft, not released)</li> </ul>	<p>Update draft guide as needed to address new COMM 47 provisions, as well as possible amendments to NR 140 and NR 700 series rules.</p>
<p><b>5) Site Prioritization</b>                      Revise current high/med/low priority system to classify sites by immediacy and magnitude of impact. Consider use of COMM prioritization system. Reserve detailed technical review for near-term, high-impact sites. [Wisconsin Admin. Code NR 710.07].</p>	<ul style="list-style-type: none"> <li>NR 710.07: LUST Site Evaluation Procedures</li> <li>COMM 47: PECFA Reimbursement Criteria</li> </ul>	<p>Revise DNR guidance regarding designation of high, medium, and low priority based on relative immediacy and magnitude of risk, as characterized by COMM environmental factors. Consider referring sites to COMM if no impacts on usable groundwater or other near-term concern (explosion, utility impact, etc.).</p> <p>Amend procedures to authorize reimbursement of engineered remedies for sites with usable groundwater impact or other near-term concern (explosive condition, utility impact, etc.). Reimburse natural attenuation remedies for low risk sites.</p>



Table 4  
 Summary of Wisconsin NR 140 Groundwater  
 Protection Standards for Selected Compounds  
 Petroleum Environmental Cleanups in Wisconsin

Constituent	Carcinogen Class	Federal MCL			WI Enforcement Standard			WI Preventive Action Limit		
		Limit (mg/L)	Target Risk	HQ	Limit (mg/L)	% MCL	Target Risk	Limit (mg/L)	% ES	% MCL
Acetone	D	0.005	1.7E-06	1	100%	2.7E-01	0.2	20%	10%	5.5E-02
Benzene	A	0.0002	1.7E-05	0.0002	100%	1.7E-06	0.0005	10%	10%	1.7E-07
Benzo(a)pyrene	B	0.1	7.0E-05	0.0006	1%	4.2E-07	0.00002	10%	0.1%	1.7E-06
Bromodichloromethane	B	0.1	9.3E-06	0.0044	4%	4.1E-07	0.00044	10%	0.4%	4.1E-08
Chloroform	B	0.1	7.2E-06	0.006	6%	4.3E-07	0.0006	10%	0.6%	4.3E-08
Dibromochloromethane	C	0.075	2.1E-05	0.075	100%	2.1E-05	0.015	20%	20%	4.2E-06
Dichlorobenzene, (1,4)	B	0.005	5.3E-06	0.005	100%	5.3E-06	0.0005	10%	10%	5.3E-07
1,2-Dichloroethane	D	0.7	1.9E-01	0.7	100%	1.9E-01	0.14	20%	20%	3.8E-02
Ethylbenzene	D	0.005	4.4E-07	0.005	100%	4.4E-07	0.0005	10%	10%	4.4E-08
Methyl Ethyl Ketone	B	0.0005	4.5E-05	0.00003	6%	2.7E-06	0.000003	10%	0.6%	2.7E-07
Methylene Chloride	D	0.005	6.5E-07	0.005	100%	6.5E-07	0.0005	10%	10%	6.5E-08
PCBs	D	1	1.4E-01	0.343	34%	4.7E-02	0.0686	20%	7%	9.4E-03
Toluene	B	0.002	4.5E-05	0.0002	10%	4.5E-06	0.00002	10%	1.0%	4.5E-07
Trichloroethylene (TCE)	D	10	1.4E-01	0.62	6%	8.5E-03	0.124	20%	1.2%	1.7E-03
Vinyl Chloride	A	0.002	4.5E-05	0.0002	10%	4.5E-06	0.00002	10%	1.0%	4.5E-07
Xylene	D	10	1.4E-01	0.62	6%	8.5E-03	0.124	20%	1.2%	1.7E-03

NOTES:

- 1) Federal MCLs correspond to U.S. Primary Drinking Water Standards for public water supply system as specified in Chap. 141, Safe Drinking Water Act. Wisconsin Enforcement Standards and Preventive Action Limits for groundwater are specified in NR 140.10.
- 2) Target risks for each concentration limit were back-calculated for residential drinking water scenario using Reasonable Maximum Exposure (RME) factors specified in U.S. EPA "Risk Assessment Guidance for Superfund, Volume 1, Human Health Evaluation Manual, Part A" (1989).
- 3) MCL = Maximum Contaminant Level Risk = Upperbound lifetime carcinogenic risk HQ = Hazard Quotient for non-carcinogenic effects.

**Table 5**  
**Definition of Groundwater Under Wisconsin Laws and Regulations**  
Petroleum Environmental Cleanups in Wisconsin

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**WI Stats 160.01 Definitions**

- (4) "Groundwater" means any of the waters of the state, as defined in s.144.01(19), occurring in a saturated subsurface geological formation of rock or soil.

**NR 140.05 Definitions**

- (9) "Groundwater" means any of the waters of the state, as defined in s.144.01(19), Stats., occurring in a saturated subsurface geological formation of rock or soil.

**WI Stats 144.01 Definitions**

- (19) "Waters of the state" includes those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems, and other surface water or groundwater, natural or artificial, public or private, within the state or its jurisdiction.

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## JOINT COMMITTEE FOR REVIEW OF ADMINISTRATIVE RULES

February 1, 1999

Joint Committee on Legislative Organization  
Senator Fred Risser, Co-chair  
Wisconsin State Capitol  
Room 220 South  
Madison, WI 53707-7882

Speaker Scott Jensen, Co-chair  
Wisconsin State Capitol  
Room 211 West  
Madison, WI 53708-8952

Dear Senator Risser and Speaker Jensen:

The Joint Committee for Review of Administrative Rules (JCRAR) at our January 28<sup>th</sup> hearing passed the following motion:

Request the Joint Committee on Legislative Organization review the actions of state agencies and their ruling authority to refuse and obstruct the Joint Committee for Review of Administrative Rules' request for the review of rules; and to have those recommendations relayed to the Joint Committee for Review of Administrative Rules by Legislative Council.

The reason for this unusual action is the refusal by the DNR, the Department of Commerce and their ruling authority to comply with JCRAR's repeated request for rules under the PECFA program. We consider this an obstruction of legislative authority for two reasons.

First, the DNR and the Department of Commerce have demonstrated a pattern of disregard for JCRAR's statutory duty to review administrative rules (see Legislative Council attachment).

Second, JCRAR requested the drafting of an Emergency Rule on September 16<sup>th</sup>, 1998, under the chairmanship of Senator Welch and Representative Grothman, and has yet to receive an appropriate response. In fact, the agencies have failed to meet their statutory responsibilities under Wisconsin Statutes §227.26(2)(b).

At the hearing on January 28<sup>th</sup> instead of a rule the state agencies provided JCRAR with a protocol. It is obvious to all that the protocol could have been easily written into an emergency rule that would have fulfilled their obligations to the committee's requests. When the state agencies were asked when the rule would be written, we heard answers ranging from "tomorrow" to "April 14<sup>th</sup>." JCRAR is not a committee of protocols but of rules (see Legislative Council attachment).

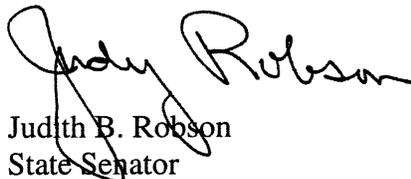
JCRAR has been continually frustrated by the DNR and the Department of Commerce's foot-dragging. PECFA is losing millions of dollars monthly and harming small businesses across the state.

It is with great regret that we find ourselves in the position of requesting the Joint Committee on Legislative Organization to act on this matter. We understand the serious implications of our request, but feel strongly about the need for your leadership in restoring the integrity of legislative oversight of the rule-making process.

We are referring this matter to the JCLO for your direction and assistance in restoring the appropriate balance between the Executive and Legislative Branches. We would like the committee to consider taking whatever avenues of redress exist, including appropriate legal action.

We would greatly appreciate a quick response to this matter.

Sincerely,



Judith B. Robson  
State Senator  
15<sup>th</sup> Senate District  
Co-chair, JCRAR



Glenn Grothman  
State Representative  
59<sup>th</sup> Assembly District  
Co-Chair, JCRAR

JBR:chmiv

cc: Senate Majority Leader Chuck Chvala  
Senate Assistant Majority Leader Rod Moen  
Senate Minority Leader Michael Ellis  
Senate Assistant Minority Leader Brian Rude  
Assembly Majority Leader Steven Foti  
Assembly Assistant Majority Leader Bonnie Ladwig  
Assembly Minority Leader Shirley Krug  
Assembly Assistant Minority Leader Marlin Schneider  
Members of the Joint Committee for Review of Administrative Rules  
Department of Commerce Secretary Brenda Blanchard  
Department of Natural Resources Secretary George Meyer  
Legislative Council



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## WISCONSIN LEGISLATIVE COUNCIL STAFF MEMORANDUM

One East Main Street, Suite 401; P.O. Box 2536; Madison, WI 53701-2536  
Telephone: (608) 266-1304  
Fax: (608) 266-3830  
Email: [leg.council@legis.state.wi.us](mailto:leg.council@legis.state.wi.us)

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DATE: January 29, 1999

TO: SENATOR JUDY ROBSON AND REPRESENTATIVE GLENN GROTHMAN, COCHAIRPERSONS OF THE JOINT COMMITTEE FOR REVIEW OF ADMINISTRATIVE RULES

FROM: Ronald Sklansky, Senior Staff Attorney

SUBJECT: Petroleum Environmental Cleanup Fund

This memorandum, prepared at your request, provides a brief history of the activities of the Joint Committee for Review of Administrative Rules (JCRAR) with respect to the Petroleum Environmental Cleanup Fund (PECFA).

### 1. September 1998

On September 16, 1998, JCRAR took a number of actions with respect to PECFA. First, the committee entertained a request from the Department of Commerce to extend the agency's emergency rule affecting various provisions of ch. ILHR 47. The emergency rule contained various efficiencies with respect to the administration of PECFA. The committee extended the effective date of the emergency rule by 60 days.

Second, JCRAR held an extensive hearing on the entirety of the PECFA program. The committee report for the September 16 meeting notes that the hearing related to:

. . . the development of administrative code for the PECFA program and the Memorandum of Understanding (MOU) between the Department of Commerce (DOC) and the Department of Natural Resources (DNR), including but not limited to agency functions with respect to the MOU and the administration of the PECFA program; methods for classification of low, medium, and high priority sites; data models for tracking sites; criteria for the establishment of preventative action limits and other standards; methods for handling sites that exceed the preventative action limits but are less than enforcement standards in order to close sites in a more



timely and efficient manner; criteria for mini-investigations; criteria for approval process and costs for this process; criteria for approval process for site investigation reports sent to the Departments directly by consultants; methods for capping costs for services provided under the PECFA program; risk-based corrective action; the transfer of sites from the DNR to the DOC; rationale and need for emergency rule NR 749; methods to reduce backlog for payment of claims; funding alternatives; and the comparison of Wisconsin with other states.

Finally, on September 16, 1998, JCRAR directed Commerce and DNR to promulgate as a joint emergency rule, within 30 days, those portions of the MOU between the departments relating to the classification of contaminated sites, the disbursement of funds and all other statements of policy. This directive carried on a vote of Ayes, 9; Noes, 0; and Absent, 1.

## 2. November 1998

On November 11, 1998, JCRAR took action on a number of requests for the extension of emergency rules, including a second extension for the emergency rule amendments to ch. ILHR 47. The extension request was granted.

## 3. December 1998

On December 8, 1998, JCRAR again met to receive requests for the extension of emergency rules. Also included on the notice of the committee hearing was the following statement:

Pursuant to the motion adopted by the Joint Committee at its executive session on September 16, 1998, the Joint Committee requests the appearance of representatives of the Department of Commerce and the Department of Natural Resources to provide the members with an update on the progress of the Departments in drafting an emergency rule in accordance with the aforementioned motion.

The inclusion of this statement in the hearing notice was an acknowledgement that the departments failed to comply with the committee's direction, under s. 227.26 (2) (b), Stats., to use the emergency rule-making process to place the policy statements contained in the MOU between Commerce and DNR into administrative rule form within 30 days of JCRAR's action.

On December 15, 1998, JCRAR went into executive session to consider again the PECFA issue. The committee's meeting occurred one day after the cochairpersons received a letter from the Secretary of the Department of Administration (DOA) indicating that the September 16, 1998 directive of JCRAR to adopt a rule would not be met.

Based on the complaints lodged against the PECFA program at the September 16, 1998 meeting of JCRAR, and due to an emergency relating to public health, safety or welfare, a motion was made to:

- a. Suspend ch. ILHR 47 in its entirety, effective at 5:00 p.m. on December 29, 1998.
- b. Vacate the rule suspension if DNR and Commerce provided to JCRAR an emergency rule incorporating the provisions of the December 14, 1998 letter by DOA Secretary Mark Bugher to the cochairpersons of JCRAR in the section of the letter entitled, "Establish Clear Site Closure Principles"; however, the vacation of the suspension motion was contingent entirely upon the approval of the emergency rule by JCRAR on December 29, 1998. A failure, for any reason, of JCRAR to approve the emergency rule would result in the suspension of ch. ILHR 47.
- c. State that it is the extent of JCRAR that, should ch. ILHR 47 be suspended, the operation of the entire PECFA program be suspended.

The motion carried on a vote of Ayes, 8; and Noes, 2.

On December 29, 1998, JCRAR met in order to review the response of DNR and DOC to the committee's motion of December 15, 1998. The departments presented an emergency rule to JCRAR, but the committee expressed its dissatisfaction with the contents of the emergency rule when it adopted the following motions:

- a. The JCRAR rescinds its December 15, 1998 motion relating to the conditional suspension of ch. ILHR 47, Wis. Adm. Code.

- b. The JCRAR, pursuant to ss. 227.19 (4) (d) 6. and 227.26 (2) (d), Stats., suspends ch. ILHR 47, Wis. Adm. Code, at 5:00 p.m. on February 1, 1999, unless a risk assessment protocol includes all of the following:

- (1) Requires the use of natural attenuation unless an environmental risk factor, as described in proposed s. 46.05, Wis. Adm. Code, is present.
- (2) Consideration of the impact of clay formation on environmental risk factors.
- (3) Consideration of the effect of a municipal water system on environmental risk factors.

The motion carried on a vote of Ayes, 8; and Noes, 2.

#### 4. January 1999

In anticipation of the February 1, 1999 suspension of ch. ILHR 47 (now renumbered as Comm 47), JCRAR met on January 28, 1999 to receive additional information from DNR and DOC. The agencies presented concepts for the remediation and closure of PECFA sites, but did not present these concepts in administrative rule form. In substance, JCRAR took the following actions:

- a. Extended the conditional suspension of ch. Comm 47 to February 25, 1999.

b. Requested the agencies to implement immediately the concepts for remediation and closure of sites developed by the departments. In addition, the concepts are to be placed in administrative rule form as soon as possible.

c. Directed committee staff to prepare a letter to the Joint Committee on Legislative Organization (JCLO) describing the history of the PECFA issue before JCRAR and the failure of DNR and DOC to comply with the committee's September 16, 1998 directive to promulgate an administrative rule under s. 227.26 (2) (b), Stats. The purpose of the letter is to seek JCLO's direction and assistance in remedying the executive branch's failure to properly respond to JCRAR.

If I can be of any further assistance in this matter, please feel free to contact me.

RS:wu:tlu:jal;ksm;wu



# Judith B. Robson

Wisconsin State Senator

FOR IMMEDIATE RELEASE  
February 1, 1999

CONTACT: Judy Robson  
Phone: (608) 266-2253

## Robson Asks Legislative Leaders to Investigate Abuse of Power

MADISON—Today State Senator Judy Robson, in a letter to the Joint Committee on Legislative Organization (JCLO), called on Governor Tommy Thompson, the Department of Commerce and the Department of Natural Resources to respect the legislative oversight of the bipartisan Joint Committee for Review of Administrative Rules (JCRAR). By ignoring JCRAR's January motion for an emergency ruling on the PECFA program the Thompson Administration is continuing a pattern of disregarding the committee's legislative authority, abuses of power that subject the Administration to possible legal action. This pattern is documented in an accompanying letter from the nonpartisan Legislative Council.

The following is a copy of the letter Senator Robson sent to Senator Fred Risser and Assembly Speaker Scott Jensen, JCLO co-chairs, and the attachment from Legislative Council:

SENATOR JUDITH B. ROBSON  
CO-CHAIR

PO Box 7882  
MADISON, WI 53707-7882  
(608) 266-2253



REPRESENTATIVE GLENN GROTHMAN  
CO-CHAIR

PO Box 8952  
MADISON, WI 53708-8952  
(608) 264-8486

## JOINT COMMITTEE FOR REVIEW OF ADMINISTRATIVE RULES

February 1, 1999

Joint Committee on Legislative Organization  
Senator Fred Risser, Co-chair  
Wisconsin State Capitol  
Room 220 South  
Madison, WI 53707-7882

Speaker Scott Jensen, Co-chair  
Wisconsin State Capitol  
Room 211 West  
Madison, WI 53708-8952

Dear Senator Risser and Speaker Jensen:

The Joint Committee for Review of Administrative Rules (JCRAR) at our January 28<sup>th</sup> hearing passed the following motion:

Request the Joint Committee on Legislative Organization review the actions of state agencies and their ruling authority to refuse and obstruct the Joint Committee for Review of Administrative Rules' request for the review of rules; and to have those recommendations relayed to the Joint Committee for Review of Administrative Rules by Legislative Council.

The reason for this unusual action is the refusal by the DNR, the Department of Commerce and their ruling authority to comply with JCRAR's repeated request for rules under the PECFA program. We consider this an obstruction of legislative authority for two reasons.

First, the DNR and the Department of Commerce have demonstrated a pattern of disregard for JCRAR's statutory duty to review administrative rules (see Legislative Council attachment).

Second, JCRAR requested the drafting of an Emergency Rule on September 16<sup>th</sup>, 1998, under the chairmanship of Senator Welch and Representative Grothman, and has yet to receive an appropriate response. In fact, the agencies have failed to meet their statutory responsibilities under Wisconsin Statutes §227.26(2)(b).

At the hearing on January 28<sup>th</sup> instead of a rule the state agencies provided JCRAR with a protocol. It is obvious to all that the protocol could have been easily written into an emergency rule that would have fulfilled their obligations to the committee's requests. When the state agencies were asked when the rule would be written, we heard answers ranging from "tomorrow" to "April 14<sup>th</sup>." JCRAR is not a committee of protocols but of rules (see Legislative Council attachment).

JCRAR has been continually frustrated by the DNR and the Department of Commerce's foot-dragging. PECFA is losing millions of dollars monthly and harming small businesses across the state.

It is with great regret that we find ourselves in the position of requesting the Joint Committee on Legislative Organization to act on this matter. We understand the serious implications of our request, but feel strongly about the need for your leadership in restoring the integrity of legislative oversight of the rule-making process.

We are referring this matter to the JCLO for your direction and assistance in restoring the appropriate balance between the Executive and Legislative Branches. We would like the committee to consider taking whatever avenues of redress exist, including appropriate legal action.

We would greatly appreciate a quick response to this matter.

Sincerely,



Judith B. Robson  
State Senator  
15<sup>th</sup> Senate District  
Co-chair, JCRAR



Glenn Grothman  
State Representative  
59<sup>th</sup> Assembly District  
Co-Chair, JCRAR

JBR:chmiv

cc: Senate Majority Leader Chuck Chvala  
Senate Assistant Majority Leader Rod Moen  
Senate Minority Leader Michael Ellis  
Senate Assistant Minority Leader Brian Rude  
Assembly Majority Leader Steven Foti  
Assembly Assistant Majority Leader Bonnie Ladwig  
Assembly Minority Leader Shirley Krug  
Assembly Assistant Minority Leader Marlin Schneider  
Members of the Joint Committee for Review of Administrative Rules  
Department of Commerce Secretary Brenda Blanchard  
Department of Natural Resources Secretary George Meyer  
Legislative Council



January 22, 1999

William J. Morrissey  
Environmental and Regulatory Services Division  
Wisconsin Department of Commerce  
Post Office Box 7839  
201 West Washington Avenue  
Madison, Wisconsin 53707

Dear Mr. Morrissey,

As Chair of the Wisconsin Association of Consulting Engineers (WACE) /PECFA Liaison Committee and a member of the COMM 47 Rules Committee I have struggled with trying to come up with some meaningful recommendations to COMM that would help the program by cutting costs without eliminating the fair and appropriate business environment necessary to keep good, solid, long time consulting engineering firms in the PECFA Program. I believe that WACE member firms have a long history of providing sound professional services that protect their clients' interests at fair and reasonable costs as their professional and business ethical principals dictate. Therefore, I think that it is important that these quality firms remain in the PECFA Program so that together with other good firms, they can set a standard of quality for the program. I think we can all agree that quality is every bit as important as price because it determines value. Spending less money and receiving poor quality is a waste of money.

In the spirit of trying to save the PECFA Program money, maintain a healthy and competitive business climate, and maintain quality and value, I propose the following PECFA Program modifications.

My suggestion is that simple is better. Cap investigations at some figure like \$40,000 and cap remediation at some figure like \$80,000. Any investigation that needs to be more has to have approval of a Review Board made of selected PECFA staff that makes the final approval. The penalty for the additional cost could be that the owner would get only 50% reimbursement on the overage. Remediation that would exceed the \$80,000 cap would face the same Review Board criteria and would have the same 50% penalty. Remediation costs of over \$100,000 or so would get shifted to the State's Environmental Cleanup Fund or other Brownfield Fund managed by the WDNR. Closure authority for PECFA sites would be under the jurisdiction of the COMM. All other sites would be under the authority of the DNR.

Any investigations or remediation done at less than the cap amounts would result in a reduction of the deductible proportional to the savings. For example, an investigation on a site done for \$30,000 and the remediation of the site done for \$60,000 would save 25% (\$30,000 out of \$120,000) of the cap so the client would receive 25% of his deductible back at the closure of the project. There would be no other caps on rates or anything else. The client would submit evidence of payment just as they do now.



I think that my proposal meets a lot of objectives that the PECFA staff appear to have. It provides a cap on spending but allows for cleanup of complex sites which fall outside the norm. Since these sites would have the most concern of the WDNR, they would have the jurisdiction over them. They would also have the responsibility to come up with the money to clean them up to the level they want. It should bring a level of cost accountability to the decision making process of when enough remediation is done to reasonably protect health, safety, and environment.

Because of limited funds in the State Environmental Cleanup Fund and other Brownfield funds, the money necessary to clean up these more complex sites may not be available until quite some time in the future. This could act as a disincentive for owners to have their sites go this route and be an incentive to them to take approaches that will have lower costs just to keep their project in the PECFA Program.

This proposed Program also provides for competition among consultants to get them to be creative in their remedial approach. Clients will want to be working with consultants that have good track records for cleaning up sites under the caps and return them some of their deductibles.

Clients are not going to like proposals from consultants that require cap exceedances unless absolutely necessary because half of the exceedance will come out of their own pockets. With the approach of this proposal, all parties have an incentive to keep costs as low as possible.

I hope that you will give this concept some consideration in your search to reduce costs in the PECFA Program. I realize that these concepts are not fully developed so that they can be immediately adopted into the program and that they require some additional refining. I would be happy to work with you to see if the concepts can be developed further and to work on any negatives you may find that I have missed.

Sincerely,

**GRAEF, ANHALT, SCHLOEMER**  
& Associates, Inc.

Jerome S. Chudzik, P.E.  
Vice President

cc: John Alberts, Wisconsin Department of Commerce  
Carol Kelso, Assembly District 88  
Senator Judith Robson  
Assemblyman Glenn Grothman  
Honorable Governor Tommy Thompson



## *Environmental Engineering and Science*

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January 6, 1998

Secretary Mark Bugher  
Wisconsin Department of Administration  
P.O. Box 7869  
Madison, WI 53707-7869

Secretary George Meyer  
Wisconsin Department of Natural Resources  
P.O. 7921  
Madison, WI 53707-7921

Secretary Brenda Blanchard  
Wisconsin Department of Commerce  
P.O. Box 7970  
Madison, WI 53707-7970

SUBJECT: Comments on Proposed PECFA Changes

Dear Secretaries Bugher, Blanchard, and Meyer:

We understand that your staff are actively working together and with the Legislature regarding modifications to the PECFA Program. We are writing to provide you and your staff with a brief outline of our suggestions based on the December 29, 1998 vote of the Joint Committee for the Review of Administrative Rules to suspend the PECFA program unless a risk based assessment protocol is adopted into administrative code. Also enclosed is a copy of our December 21, 1998, letter to Mr. Bill Morrissey of the Department of Commerce regarding the proposed cost control measures and the usual and customary cost caps.

To achieve financial stability for the PECFA program we feel that three key components need to be strongly considered:

1. **The application of Risk-Based Corrective Action (RBCA), including natural attenuation, institutional controls and other "flexible closure" options for remediating sites, should be continued and increased where possible.** We would like to point out that great strides have already been made by the Departments of Commerce and Natural Resources in this area and the per-site remediation costs have been dramatically reduced. However, these cost savings may not yet be apparent in the PECFA claim backlog due to the long time frame between when the remediation work is done and when the claim is processed. Any additional changes to increase the application of RBCA will need to be consistent with the Groundwater Protection Standards of Chapter 160, Wis. Stats., and should be applied consistently to non-petroleum releases as well as petroleum releases.
2. **A "gatekeeper" provision should be adopted as the ultimate control to match expenditures to available funds by queuing sites for remediation.** This approach would allow the PECFA program to know of future costs and schedule remediation to match available funds, rather than waiting for claims to come in. If RBCA can be used

Secretaries Bugher, Blanchard, and Meyer  
January 6, 1998  
Page 2

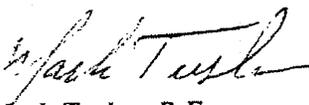
to reduce costs to the level of annual funding, then this provision would no longer be necessary. However, in the interim, it is better to have a queue for remediation than a queue for claim payment after the work has been done, with interest charges accumulating. Bidding for remediation fits well with this provision, but the gatekeeper concept can be extended beyond those sites where remediation bidding is employed and can add the dimension of scheduling of costs. With a gatekeeper provision, we believe that it would be important to allow remediation to be able to proceed at properties "outside of the queue" as needed due to a pending property sale, redevelopment, or other reason; however, the eventual funding for the work would be subject to the availability of PECFA funds and the site's place in the queue.

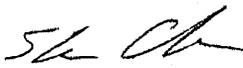
3. **Finally, we believe that the PECFA and brownfields programs should be consolidated into one agency, or managed as closely coordinated interagency programs.** The strongest management approach would come from a single agency with the authority and responsibility of managing both the environmental and the financial provisions of both the PECFA and brownfields programs. The PECFA program has been a very effective brownfields program, getting properties cleaned up and closed so that redevelopment can proceed. In our opinion, administration of PECFA and the other remediation programs by a single agency would lead to a more effective allocation of staff and funding resources to the multiple competing demands. If the single agency approach cannot be formally implemented, then the agencies need to work very closely together to maximize the benefits of the PECFA and brownfields programs. The two agencies could achieve the effect of a single-agency approach by intensive staff interaction, coordinated management, and shared budgets and goals.

We believe that the Department of Natural Resources and the PECFA program have made considerable strides in reducing costs at petroleum tank remediation sites over the last two years. The per-site investigation and remediation costs have dropped dramatically. Still, we believe that the PECFA program could benefit significantly from implementing the changes described above.

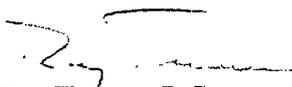
We appreciate the opportunity to comment on the proposed PECFA changes. If you would like to discuss our comments or if we can be of any other assistance, please call us at 224-2830.

Sincerely,  
*BT<sup>2</sup>, Inc.*

  
Mark Tusler, P.E.  
Vice President, Senior Engineer

  
Sherren Clark, P.E., P.G.  
Principal, Senior Engineer

  
Tom Bergamini, P.G.  
President, Senior Hydrogeologist

  
Ray Tierney, P.G.  
Principal, Senior Hydrogeologist

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## ***Environmental Engineering and Science***

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December 21, 1998

Bill Morrissey  
Wisconsin Department of Commerce, PECFA Program  
201 W. Washington  
P.O. Box 7838  
Madison, WI 53707-7838

**SUBJECT:** Comments on Proposed PECFA Changes

Dear Mr. Morrissey:

We are writing to provide our input on the proposed changes to the PECFA program, including the proposed introduction of usual and customary cost caps as outlined in AERC Alert 70. We have been working in the PECFA program since BT<sup>2</sup> was founded in 1991 and we want to see the program continue to help claimants get their sites cleaned up and closed. We know that improved cost control measures are needed to ensure that the limited PECFA funds are spent wisely, with a focus on cleaning up the most contaminated sites and doing the work efficiently and cost-effectively.

We believe that the concept of usual and customary cost caps can be an effective means of controlling costs in the PECFA program. The program needs a stronger means of identifying and disallowing excessively high hourly rates or per task costs. However, we have some concerns regarding the specific caps proposed and the approach to be used in implementing the caps.

### **General Approach for Improved Cost Control**

PECFA claimants and consultants need to have a reasonable assurance of whether the work they do will be reimbursed by the fund. To have this security and maintain cost control, the cost control needs to be focused on the front end of the project, in the hands of the site review staff, not at the back end of the project with the claim review staff. The claim reviewers are in a good position to look at straightforward issues of eligibility, such as the proposed hourly rates or the ineligible items proposed for the additional 50% deduction. However, the site reviewers are in the best position to evaluate whether the proposed work follows a reasonable approach and whether the budgeted costs are appropriate for the work. These decisions need to be made before the costs are incurred, not at claim review time. If there are differences of opinion regarding the approach or cost between Commerce, the DNR, the claimant and/or the consultant, these differences need to be resolved before the work is done, not when the claim is reviewed and an appeal is filed. Resolution of these issues before the work is done benefits all of the parties involved.

We believe that the Commerce site review staff are the best resource for cost control. They have a technical understanding of the site and the experience to identify unreasonable costs. We recommend that the current level of site review be maintained or increased, with the per task cost caps used as a guide in pre-approving project budgets. We believe that the site review staff have already saved the

Mr. Bill Morrissey  
December 21, 1998  
Page 2

PECFA program millions of dollars, and additional site review positions would more than pay for themselves, especially with the added leverage provided by the hourly and per task cost caps.

To further control costs, we recommend that Commerce consider lowering the current \$40,000 cost cap for site investigation to \$15,000 or \$20,000, with site review approval needed to exceed this cap. The \$80,000 cost cap for complete site remediation without required review could also be substantially lowered to provide for more review. For either of these categories of sites, Commerce could also consider bidding or bundling if the proposed approach or costs are unreasonable.

Once a site investigation or remediation approach and budget have been approved by the site review staff, we believe the claimant and consultant should have the flexibility to go ahead and implement the proposed approach. Provided that the proposed approach is implemented within the approved budget, the consultant and the claim reviewer should not need to try to reevaluate the per task rates on an invoice by invoice basis. This would take a great deal of effort for little or no benefit. It is possible that the per task costs will be exceeded on one item, but would be lower on another with the net result being within the approved budget. The "bottom line" should be whether the total project or major project phase (site investigation or remediation) was completed within the approved budget.

Focusing the cost control at the site review budget approval step also provides Commerce with a means for forecasting costs and, if necessary, acting as a "gatekeeper." For sites that do not appear to have high priority based on the initial investigation, Commerce could slow down the pace of investigation and remediation budget approvals to a rate that matches the available funds.

#### **Classification Levels and Hourly Rate Caps**

We understand that the proposed hourly rate caps are needed. The proposed rates, which apparently were selected as being approximately to the current median rate, do not appear unreasonable on their own. However, combined with the proposed addition of more ineligible cost categories for both labor and expenses, the net effect is equivalent to reducing the maximum hourly rate to well below the current median rate for each category. We also have particular concerns regarding the Principal and Clerical categories, and the additional stipulation of a maximum percentage of time for the Senior Project Manager category.

For the Principal category, we agree that the administrative and organization duties described by Commerce are part of overhead and should not be billed to a project, PECFA or otherwise. However, our principals are P.E.'s and P.G.'s and are our most experienced project managers. They manage PECFA projects and bill for their project-related duties at the same rate as our Senior Project Managers. Due to their administrative responsibilities, they are typically only about 30-50% billable, but their billable time includes the duties described by Commerce for the Senior Project Manager classification. We would like Commerce to clarify that, while working on PECFA projects, our principals can bill their time as Senior Project Managers.

For the Clerical category, we believe that the proposal to deny reimbursement for clerical time will increase costs, not decrease them. We have worked hard to develop an efficient system for getting PECFA projects done. We involve lower billing rate administrative staff whenever possible, to keep the project costs down. Our clerical staff prepare analytical results tables and graphs and assist in report preparation, allowing these costs to be done more quickly and at a lower rate than if the engineers or hydrogeologists do the work themselves. Denying eligibility for clerical costs creates a

Mr. Bill Morrissey  
December 21, 1998  
Page 3

strong disincentive for this approach. If other firms are charging for general administrative time, such as receptionist or accounting time, we can understand that Commerce would like to eliminate these charges. However, we don't bill for office administration tasks and we don't want to lose our option to maintain low costs by using well-trained clerical staff to assist with data analysis and report preparation.

Finally, for the Senior Project Manager category, we believe that the added restriction that no more than 30% of the costs fall in this category is unnecessarily restrictive and would be difficult to track. With per task cost caps and maximum budgets for site investigation and remediation, we need the freedom to do the work in the most efficient way possible. Sometimes this means having an experienced project manager spend 2 hours (\$170) on a task that would take a staff engineer 3 hours (\$195). The bottom line should be the total project cost, not what combination of staff types was used to complete the work.

### **Per-Task Cost Caps**

We believe that per task cost guidelines could potentially provide a useful basis for evaluating proposed project budgets and for eliminating unreasonably high costs which are seen as program abuse. However, the major project cost savings will come in the scoping of the site investigation and the selection of a remediation approach. These major cost savings can best be achieved through the site reviewer's budget approval process and the bidding process, not through a complicated matrix of per-task and hourly rate caps.

If per-task cost caps are implemented, we believe they should be implemented by the site review staff as part of the budget approval process, not by the claim review staff on an invoice-by-invoice basis. For remediation projects that go through the bidding process, the competitive bids should be relied on to ensure reasonable and fair costs, without the added constraint of trying to reconcile specific per-task cost with the caps.

Based on our experience, some of the proposed cost caps are reasonable, at least for typical sites, but others appear to be unreasonably low. The background information provided to us by AERC indicates that the cost caps were generally established at the estimated current median per-task costs. Median costs are appropriate as guidelines and should be met for typical projects where tasks proceed as planned. However, not all projects are typical and not all tasks proceed as planned; therefore, costs for some tasks legitimately exceed median costs. To allow for non-typical sites or conditions, we believe that the cost caps should be implemented as guidelines, with the site review staff having the freedom to approve higher costs if the claimant and consultant can justify the additional cost on a site-specific basis.

The graphs of per task cost data that were provided to us by AERC indicate that many of the proposed per task cost caps for consultant services are based on very limited data. For several tasks, there are fewer than 10 data points used to determine the median, and the standard deviation is very large. For example, the air sparge pilot test graph only includes 4 points and the selected cost cap was not the median, but a value lower than any of the four data points.

For many tasks, the level of effort needed is a function of the complexity of the case. For example, a site investigation report for a site with 10 Geoprobe borings should easily be done within the proposed cap, but a report for a site with 10 borings, 5 monitoring wells, 3 piezometers and several rounds of

Alternate Cost Caps provided by BT<sup>2</sup>, Inc.

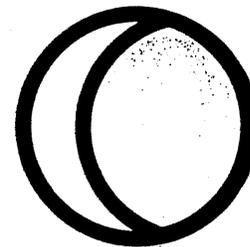
	Proposed	Alternate
	Cap	Cap
SI Workplan	\$750	\$1,500
SI Report (including RAP)	\$4,000	\$5,000 or 20% of consulting costs
Semiannual Report	\$500	\$1,000 (\$2,000 for the initial report)
Annual Report	\$750	\$1,000
Closure Request	\$2,000	Cost limit does not include field sampling
Remedial System Design	\$2,500	
Design Report	\$2,000	
Asbuilt Report	\$1,500	
Site Specific RCLs	\$2,800	\$1,500
Obtain Permit	\$250	\$3,000 Highly dependent on type of permit
Well Installation	\$150	limited to soil borings, well installation may be \$200 to \$600 or more depending on geology.
Well Development	\$75	Cost is limited to fieldwork for wells 20 feet deep or less
Well Closure	\$75	Wells <50ft (Wells >50ft require grouting)
Well Sampling	\$100	
Remedial System Startup	\$1,500	Site specific approval by Commerce site reviewers
Remedial System Sampling	\$100	
Commodity Bid Prep	\$200	
Engineered System Bid Prep	\$1,500	Limited to bids for monitoring well installation and soil boring
Pumping Test	\$2,100	
SV Pilot Test	\$2,100	
SV and AS Pilot Test	\$2,900	
Pilot Test Equipment	\$500	
<b>Other Required Consultant Activities</b>		
Project Planning and Communication		15% of consulting costs
System Cleaning		Site specific approval by Commerce site reviewers
System Repair		Site specific approval by Commerce site reviewers
Survey		\$100 per well
Boring/Well Documentation		\$100 per well/boring
Soil Excavation Bid Package		\$4,000
Soil Excavation Oversight/Documentation		\$3,000 plus \$2000/1000 ton
Engineered System Installation Oversight		Site specific approval by Commerce site reviewers
Long-Term Monitoring Plan		\$600

Note: Caps are guidelines. Caps may be exceeded with site specific approval by Commerce.





PMAW



WACS

January 21, 1999

David P. Schmiedicke  
Department of Administration  
101 Easy Wilson Street  
P.O. Box 7864  
Madison, WI 53707-7864

Dear Dave:

Thank you for taking the time to discuss changes to the PECFA program recently. At our meeting, we discussed the State's Groundwater Law and you invited our thoughts as to how the groundwater law allows for the use of Risked Based Corrective Action (RBCA) in remediating petroleum contaminated sites.

I asked Don Gallo, our attorney at Michael, Best and Friedrich, to review Chapter 160 to determine if RBCA could be utilized by the Department of Natural Resources and the Department of Commerce consistent with the intent of Chapter 160. I have attached Don's memo for your review.

Our organization is interested in reducing the costs of remediating petroleum contaminated sites for whomever is paying the costs. We believe RBCA as it is implemented in other states, and as recommended by the U.S. Environmental Protection Agency (USEPA) can be cost effective and environmentally protective.

We look forward to working with you to help improve the PECFA program. Please call me should you have any questions.

Sincerely,

Robert J. Bartlett  
Executive Vice President

c: Jay Hochmuth, Department of Natural Resources  
John Alberts, Department of Commerce

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MEMORANDUM

TO: Robert J. Bartlett

FROM: Donald P. Gallo, Esq., P.E.  
Mark C. Treter, Esq.

DATE: January 21, 1999

RE: Chapter 160 Groundwater Protection Standards, Wis. Stats. -- ASTM Risk-Based Corrective Action Applied at Petroleum Release Sites ("RBCA")

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Introduction

You have asked us to review Chapter 160 Groundwater Protection Standards, Wis. Stats., to determine if the ASTM E 1739-95 Standard Guide for Risk-Based Corrective Action Applied at Petroleum Sites<sup>1</sup> could be utilized by the Department of Natural Resources and the Department of Commerce consistent and in compliance with the delegation of authority and legislative intent of Chapter 160 - Groundwater Protection Standards, Wis. Stats. We respect the legislative intent of Chapter 160 and in no way wish to compromise this objective. We also respect and wish to recognize the extensive efforts of WDNR and Commerce staff to meet this legislative intent.

Foundation

This question has been partially answered in two documents which compare the Wisconsin corrective action regulations NR 700 series and NR 140 Groundwater Quality to RBCA:

1. RBCA Fact Sheet prepared by the WDNR, October, 1996 which provides a brief overview of the WDNR NR 700 et seq administrative corrective action process and identifies

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<sup>1</sup> While this analysis focusses on risk-based corrective action applied at petroleum sites, the RBCA process is not limited to a particular class of compounds. ASTM E1739-95, 1.10. The ASTM E1739-95 standard guide "is intended to complement but not supersede federal, state, and local regulations." ASTM E1739-95, 1.4.

opportunities for application of the risk management elements of the ASTM RBCA process<sup>2</sup>.

2. Implementability of Risk-Based Corrective Action (RBCA) in Wisconsin, by Groundwater Services, Inc., May 13, 1996. This report concludes that the Wisconsin corrective action regulations and ASTM RBCA share the objective noted in footnote 2 and that although the procedural steps between the two methodologies differ, "the Wisconsin program does address the key risk management objectives of concern under RBCA."

Please keep in mind that RBCA is not a remedy, but a method to select a remedy. RBCA "is a consistent decision-making process for the assessment and response to a petroleum release, based on the protection of human health and the environment."<sup>3</sup>

Chapter 160 provides delegation of authority for groundwater protection standards from the legislature to the state administrative agencies. The legislative intent of Chapter 160 is "to minimize the concentration of polluting substances in groundwater through the use of numerical standards in all groundwater regulatory programs." §160.001, Wis. Stats.

Chapter 160 establishes "an administrative process which will produce numerical standards"<sup>4</sup> and "provides guidelines and procedures for the exercise of regulatory authority which is established elsewhere in the statutes and does not create independent regulatory authority."<sup>5</sup> The statute further states that the "enforcement standards and preventative action limits adopted under this chapter provide adequate safeguards for public health and welfare."<sup>6</sup>

Attachment A provides the key Chapter 160 paragraphs referenced in this memorandum.

#### Short Answer

The short answer is a qualified yes - the ASTM E 1739-95 RBCA Standard with certain qualifications probably is consistent with and in compliance with the legislative intent and the expressed

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<sup>2</sup> The RBCA Fact Sheet states that the "Wisconsin corrective action rules and the ASTM RBCA process share the objective of protecting public health and the environment in a cost-effective manner."

<sup>3</sup> ASTM E 1739-95, 1.1.

<sup>4</sup> §160.001(1), Wis. Stats.

<sup>5</sup> §160.001(3), Wis. Stats.

<sup>6</sup> §160.001(5), Wis. Stats.

language of Chapter 160, Wis. Stats. The key qualifications are further noted in this memorandum and include:

1. Chapter 160 and RBCA each establish a process for developing numerical standards. The processes and the standards have their differences; and
2. Although the evaluation, selection, implementation of remedial/corrective actions and monitoring of the effectiveness of the remedial actions are substantially similar, the site closure and correspondingly the costs for obtaining closure may be quite different due to current interpretation differences in "point of application" of the numerical standards<sup>7</sup> and differences in how risks and exposure assessments are evaluated. This interpretive difference can be narrowed and correspondingly closure costs can be reduced consistent with Chapter 160.

### Analysis

Given that Chapter 160 is quite prescriptive with respect to development of numerical standards<sup>8</sup>, the corrective action program will have to respect and utilize the Chapter 140 groundwater quality standards. The best opportunity for further integration of the RBCA process in compliance with Chapter 160 into the NR 700 remedial action process to save costs is in three significant areas:

1. Chapter 160 provides the administrative agencies considerable latitude in determining the "point of standards application"<sup>9</sup>;
2. The corrective action remedial response actions and management practices for site specific applications also have considerable latitude to "take into account...the uses of the aquifer, the degree of risk,...and the probability of whether,...the enforcement standard will be exceeded at the point of standards application."<sup>10</sup> These concepts are quite consistent with the RBCA methodology; and
3. The risk-benefit considerations, the hydrogeological considerations and the management and practice consideration<sup>11</sup> are also reasonably consistent with the RBCA methodology.

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<sup>7</sup> §160.21(2), Wis. Stats.

<sup>8</sup> §160.05 through .15, Wis. Stats.

<sup>9</sup> §160.21(2), Wis. Stats.

<sup>10</sup> §160.21(3), Wis. Stats.

<sup>11</sup> §160.21(4), Wis. Stats.

It is these three concepts that provide considerable latitude in applying RBCA concepts and thereby reducing costs while meeting the legislative intent of Chapter 160.

We believe that Chapter 160 states that you must have a remedy when an enforcement standard is exceeded at a point of standards application. This is supported by the statement "or, if only a preventative action limit is attained or exceeded, no remedial action."<sup>12</sup> Therefore, under certain site specific circumstances, a PAL exceedance may not trigger a remedial action but an ES exceedance does require a remedial action. With this requirement, the key question(s) then are:

1. Whether under RBCA "natural biodegradation"<sup>13</sup> and under Wisconsin administrative guidance "natural attenuation" is an acceptable remedy given the site-specific conditions analysis when an ES is exceeded; and
2. At what location do you apply the groundwater standard ("point of standards application") for the preventative action limit ("PAL") and the enforcement standard ("ES"). Note that California, Minnesota, the United States Air Force and many others support natural attenuation as an acceptable remedy under certain site specific conditions.

#### Point of Standards Application

Section 160.21(2)(a)(1) establishes the point of standards application for applying the preventative action limit "at any location where groundwater is monitored". Keep in mind a remedial action may not be required for a PAL exceedance.

Section 160.21(2)(a)(2) a through c establishes the point of standards application as:

- a. Any point of present groundwater use;
- b. Any point beyond the property boundaries...; and
- c. Any point beyond the design management zone but within the property boundaries....

#### Cost-Effective Remedy Selection

The standardized RBCA approach seeks to achieve cost-effective remedy selection through a tiered approach that matches the planning and response efforts to the relative complexity of the site and the risk presented. The RBCA standard also recognizes the economic impact of agency action, and therefore includes a streamlined approach to conducting agency reviews and approvals.

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<sup>12</sup> §160.21(3), Wis. Stats.

<sup>13</sup> ASTM E 1739 3.1.A.1

Chapter 160, Wis. Stats., also identifies cost-effectiveness and economic feasibility as key factors to be considered in selecting response actions and in agency rulemaking.

At 160.19(2)(a), the legislature directs the regulatory agency to promulgate rules that protect groundwater in a manner that is technically and "economically feasible." The statute provides at §160.21(3) that "Responses may vary depending on . . . the cost effectiveness of alternative responses that will achieve the same objectives under the conditions of the site." At §160.23(1)(a) and (b) concerning sites where there has been an exceedance of the groundwater preventive action limit, the statute provides that the implemented response is to minimize the concentration of the substance in groundwater "to the extent technically and economically feasible."

### Conclusion

In conclusion, accepting the current NR 140 Subchapter II groundwater numerical standards, there appears to exist additional latitude for modification(s) of the NR 700 et seq. remedial action response process regulations and NR 140 Subchapter III Evaluation and Response Procedures incorporating the methodology of the ASTM RBCA standard in compliance with Chapter 160 Groundwater Protection Standards, Wis. Stats., to reduce corrective action and site closure costs.

This conclusion needs to recognize that the current WDNR regulations and guidance already embrace and incorporate much of the RCBA process. We recommend further refinement to the existing regulations and guidance because considerable cost savings can be realized in more efficiently and effectively remedying and closing these petroleum contaminated sites. Our recommendations include modifying the response action selection process to incorporate current and future uses of the aquifer, the degree of risk and the probability of whether an ES will be exceeded at the point of standards application.

Given the highly technical, complex and legal nature of these issues, the details of working through these modifications will require considerable effort in evaluating and reconciling corrective action responses taking into account these recommendations and the policy questions of "reasonable time" given present and future uses consistent with the Chapter 160 legislative intent to "minimize the concentration of polluting substances in groundwater".

Attachment A

Section 160.19(2) Regulatory agency; design and management criteria states:

(2)(a) Each regulatory agency shall promulgate rules which define design and management practice criteria for facilities, activities and practices affecting groundwater which are designed, to the extent technically and economically feasible, to minimize the levels of substances in groundwater and to maintain compliance by these facilities, activities and practices with preventative action limits, unless compliance with the preventative action limits is not technically and economically feasible. (emphasis added).

(3) A regulatory agency may not promulgate rules defining design and management practice criteria which permit an enforcement standard to be attained or exceeded at the point of standards application.

160.21 Adoption of rules for regulatory responses for groundwater contamination.

(1) For each substance for which an enforcement standard or a preventive action limit is adopted by the department, each regulatory agency shall promulgate rules which set forth the range of responses which the regulatory agency may take or which it may require the person controlling a facility, activity or practice which is a source of the substance to take if:

(a) The preventative action limit is attained or exceeded at the point of standards application; or

(b) The enforcement standard is attained or exceeded at the point of standards application.

(2) Each regulatory agency shall determine by rule the point of standards application for each facility, activity or practice which is the source of a substance for which an enforcement standard or a preventive action limit is established, as follows:

(a) If monitoring is required under existing rules for a facility, activity or practice:

1. The regulatory agency shall establish a point of standards application at any location where groundwater is monitored for the purpose of determining whether the preventative action limit is established, as follows:

2. The regulatory agency shall establish a point of standards application at the following locations for the purpose of determining compliance with enforcement standards, or

*Pt. of Standards*  
→

*ES Pt. of Standards Application*

determining whether design and management practice criteria established under s. 160.19(2)(a) successfully maintain compliance with preventive action limits:

- \* a. Any point of present groundwater use;
- \* b. Any point beyond the property boundaries of the premises where the facility, activity or practice is located or undertaken; and
- \* c. Any point beyond the design management zone but within the property boundaries of the premises where the facility, activity or practice is located or undertaken.

(b) If monitoring is not required under existing rules for a facility, activity or practice:

1. The regulatory agency shall establish a point of standards application at the following locations for the purposes of determining whether the preventive action limit or the enforcement standard is attained or exceeded:

a. Any point of present groundwater use, except the regulatory agency may exempt points of nonpotable groundwater uses if the regulatory agency determines that the substance will not affect the nonpotable groundwater use; and

b. Any point beyond the property boundary of the property where the facility, activity or practice is located or undertaken.

2. The regulatory agency may establish by rule additional points of standards application which the regulatory agency determines are necessary to protect future groundwater uses and the public interest in the waters of the state.

(3) Responses may include remedial actions, revisions of rules or criteria on facility design, location and management practices, prohibition of an activity or practice or closure of a facility. Remedial actions for a specific site may include, but are not limited to, investigations, relocation, prohibition of activities or practices which use or produce the substance, closure of a facility, revisions of operational procedures, monitoring or, if only a preventive action limit is attained or exceeded, no remedial action. Responses may vary depending on the type and age of the facility, the hydrogeological conditions of the site and the cost effectiveness of alternative responses that will achieve the same objectives under the conditions of the site. Responses shall take into account the background water quality at the site, the uses of the aquifer, the degree of risk, the validity of the data and the probability of whether, if a preventive action limit is exceeded, the enforcement standard will be exceeded at the point of

*If only a PAL  
Criteria for  
appropriate  
response  
selection -  
"RBCA like"*

standards application. In requiring a remedial action for a specific site, the regulatory agency shall use the authority and existing protections, including, but not limited to, due process provisions in other applicable statutes.

(4) In setting forth the range of responses and providing for implementation of appropriate responses under the rules promulgated under subs. (1) and (3), the regulatory agency shall consider, where applicable, the following:

(a) Risk-benefit considerations including, but not limited to:

1. Uses and substances alternative to the present use of the particular substance.
2. Risks and benefits of the alternative uses or substances.
3. Reliability and comprehensiveness of the information available for assessing such risks and benefits.

(b) Hydrogeological considerations including, but not limited to:

1. The depth to groundwater.
2. The soil characteristics.
3. Groundwater gradients and flow direction.

(c) Management and practice considerations including, but not limited to:

1. Reliability of sampling data.
2. The geographic extent of the substance if detected in groundwater and the size of the population affected.
3. The efficacy of label restrictions and other practical measures to minimize the concentration of the substance in the groundwater.
4. The existing effects and potential risks of the substance on potable water supplies.
5. The risks considered when the standard at issue was established or adopted.
6. The known depth of the substance in the groundwater.
7. Data and information provided by the manufacturer on the environmental fate of the substance.



STATE SENATE • WISCONSIN LEGISLATURE

**JUDITH B. ROBSON**

**BRIAN BURKE**

CO-CHAIR, JCRAR

CO-CHAIR, JOINT FINANCE COMMITTEE

January 29, 1999

Senator Chuck Chvala  
Chair, Senate Organization Committee  
Room 211 South  
State Capitol Building  
Madison, WI 53707

Dear Senator Chvala:

We are writing to request that the Senate Organization Committee request an Opinion of the Attorney General on a legal debate between the Department of Commerce and the Department of Natural Resources in regards to the Petroleum Environmental Cleanup Fund Act (PECFA).

At issue is whether or not risk-based standards, such as the American Society for Testing and Materials' (ASTM) Risk-Based Corrective Action (RBCA), could be used when implementing PECFA and still be in compliance with the State's Groundwater Protection Standards (§ 160, Wisconsin State Statutes). The two agencies seem to be at an impasse as to the answer to this question, and a definitive answer seems necessary for the program to proceed effectively.

Given the timeliness of the issue, a quick response would be greatly appreciated. If you have any questions do not hesitate to call either of us.

Sincerely,

A handwritten signature in black ink that reads "Judith B. Robson".

Judith B. Robson  
State Senator  
15<sup>th</sup> Senate District  
Co-Chair JCRAR

A handwritten signature in black ink that reads "Brian Burke".

Brian Burke  
State Senator  
3<sup>rd</sup> Senate District  
Co-Chair, Joint Finance Committee



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Tel: (414) 549-6898  
Fax: (414) 549-6938  
[www.envirogen.com](http://www.envirogen.com)

January 28, 1999

Judith Robson  
Wisconsin 15<sup>th</sup> Senate District  
Room 15 South  
State Capitol  
P.O. Box 7882  
Madison, WI 53707-7882

Dear Ms. Robson:

Attached is a copy of the comments I presented at the meeting of the Legislative Audit Committee on Wednesday, January 27, 1999. We appreciate your efforts to help work out some of the problems of the PECFA program.

If there is any way we can assist you in this process, please do not hesitate to contact me at (414) 549-6898.

Sincerely,  
Envirogen, Inc.

A handwritten signature in cursive script that reads 'Doug Jacobson'.

Doug Jacobson  
Senior Vice President

## PECFA SITE BIDDING PROCESS

The new site bidding process has significant potential to reduce PECFA program costs to bring sites to closure. There are several significant problems, however, with the way the site bidding process is currently operating. The problems are as follows:

### **Site Investigations:**

Many of the sites being placed into the bidding process are very poorly characterized. Selection, scoping, and appropriate remedial response to achieve closure for these sites cannot be completed with any degree of certainty. Placement of these sites into the bidding process allows reimbursement submittal of the incomplete investigation costs effectively letting the original consultant off the hook. WDNR review of the available site information is needed to ensure that it is sufficient enough to develop an appropriate remedial response prior to soliciting bids and allowing reimbursement of the site investigation costs.

### **Remedial Options:**

There is no method in place to ensure that the low cost bid is feasible and can be reasonably expected to achieve site closure. The responsible party has no choice but to live with the costs for the low cost option. There is nothing to stop a consultant from "low balling" a number of these sites, working them for 2 - 4 years or longer, getting paid, and then closing the doors when the capped budgets are exhausted. Loss of the yet-to-be-implemented Licensed Site Professional registration is not likely to mean much to someone at a firm that has gone out of business. The owners of these unclosed sites may be left facing substantial liability in terms of costs needed to actually achieve closure. WDNR review of the proposed remedial option is necessary to ensure that closure can be expected to result from its' implementation.

### **Closure Flexibility:**

There is no method in place to properly address off-site contamination. Under the bidding process, the low cost bids will undoubtedly be based on obtaining flexible closure. Within the current regulatory framework, to achieve closure for a site with off-site contamination (a large percentage of all PECFA sites), the off-site property owner must be willing to accept restrictions to their deed. There is no incentive for owners of surrounding properties to agree to this, or guarantee that they (or future owners) will ultimately accept these restrictions. Failing to obtain the deed restrictions will likely result in a requirement for long-term monitoring. This represents a substantial liability to site owners and should be addressed prior to initiating the bidding process.



January 25, 1999

The Honorable Tommy G. Thompson, Governor  
State Capitol  
P.O. Box 7863  
Madison, WI, 53707

Madison, WI

Dear Governor Thompson:

I'm writing to express my concern over the proposed emergency rules for the PECFA program, a program fraught with financial difficulties, lack of cooperation between government agencies, and an increasingly adversarial relationship between agencies and the consultant community. While the program's difficulties are many and there's plenty of blame to go around, some of the "fixes" being proposed are likely to increase, not decrease, the program's cost. I'll concentrate on a few salient points of the proposed rules which adversely affect the efficiency of the program, impair consultants' ability to provide professional and effective services, and are highly prejudicial and seriously lacking in merit.

Before I get into specifics, let me say that I agree that the PECFA program needs changes, changes which will both affect the speed at which sites are closed and the cost to achieve closure. Further these changes need to encourage all parties to control costs and speed closure – COMM, DNR, consultants, contractors, bankers, and claimants. As the program currently stands, only COMM has an incentive to meet the goals – and they can't do it by themselves. The changes must be comprehensive, not piecemeal as proposed in these emergency rules. PECFA is sick – it needs to be cured. But these rules attempt to outlaw the symptoms, rather than address the disease itself.

So, what do I find objectionable?

The PECFA program wants consultants to provide free services. Hard to believe? That's what I thought when I read the proposal. So I re-read it. Same result. Here's what COMM wants to do:

1. Cap the charge rates (read: institute wage/price controls) for various classifications of consultant employees. This is in response to the fact that a few disreputable consultants have been charging exorbitant rates for some of their employees. The proposed rates, for the most part, are on the low end of current salary structures. These salary structures are based on current overhead rates which assume that costs which can be identified as belonging to a particular project are billed to that project directly, not "absorbed into overhead," (as COMM is suggesting). This point will become important later in this discussion.

2. Cap the total charges for various activities associated with a project, regardless of site complexity. This “one size fits all” approach totally ignores the fact that every site is different and may, in fact, require a different level of effort. With both the total charges and the individual rates capped, the rules effectively limit how many hours can be charged to a project. Thus COMM pays too much for some sites and is unwilling to pay enough for others.
3. Now comes the kicker – COMM wants consultants to perform necessary and legally required work but not charge for it. How so?
  - They say we can’t charge for clerical staff. Obviously clerical staff must be used. So how are we to pay their salaries and their benefits? COMM thinks we should just “absorb” it in our overhead rate. Surely they don’t think that makes those costs go away. When a company puts additional costs into their overhead, the overhead rate goes up. Since COMM won’t allow us to charge directly for the clerical time and since salary rates (hence overhead rates) are capped, we cannot recoup these costs which are essential to project completion. We must provide them gratis.
  - COMM also won’t pay for travel time. Are they suggesting that consultants not visit the sites – that we “dry-lab” projects? I doubt it. I certainly hope not. No reputable consultant would even consider it. In fact, to do so would violate the Rules of Professional Conduct of the Wisconsin Administrative Code. Hopefully COMM isn’t suggesting such violation of Wisconsin law would be acceptable. So once again, it’s pretty obvious that they expect us to provide this service for free. But the list goes on:
    - ◆ COMM has not included the Remedial Options Analysis Report as an approved (cost reimbursable) activity – yet the report is required under NR 700.
    - ◆ Operation and maintenance of active remediation systems is not included in the list of approved activities – certainly COMM can’t believe these systems run themselves.
    - ◆ The same applies to mileage expense, O&M plans, PECFA claim preparation, and other required expenses.

Since consultants aren’t permitted to print money, it’s clear that COMM expects us to provide these services for free. I don’t think that’s the kind of “business-friendly” environment you’ve been working so hard for 12 years to create. COMM apparently hasn’t been listening to you lately. Besides, we’ve proven over and over again in this country that wage and price controls are counterproductive and just don’t work.

COMM apparently thinks that putting the squeeze on all consultants is the solution to controlling the few abusers. This is too often the simplistic approach of government – punish everyone to prevent the abuses of a few. What this approach will actually do is lower the overall quality of the program. The simple fact of the matter is that we have a lot of sites to clean up, and the cost to clean them up to meet the mandated standards may seem to some to be more than should be spent. The cost to clean them up in the timeframe we’d like to have them completed may be more than the tax revenue being generated. That doesn’t mean it shouldn’t cost that

much. Given that our groundwater standards are sometimes orders of magnitude cleaner than most other states, wouldn't one expect clean up costs also to be higher than other states? In the final analysis, the state seems to want the cleanest groundwater in the nation but expects to pay the average cost.

Recent changes in closure philosophy have helped immensely. And the reduced number of expensive active systems which require expensive ongoing operation and maintenance will further reduce the financial burden. I find it hard to believe that a clear thinking person would seriously believe that the few dollars to be wrung out of the cost side of the program by the proposed changes will be worth the trade-off in quality. In fact, we've been told by people at COMM that they really don't think these changes will save significant amounts of money. But it's clear to us that, with all of the heat COMM is getting from the legislature, they have to do something which would at least appear to control costs, even if they don't.

There has been no analysis provided showing how these changes will save money. That's a fact, pure and simple. This is a "feel good" proposal with no sound basis in fiscal analysis. I would argue that this is hardly a responsible basis on which to propose such sweeping changes.

Good firms who can't make a fair profit will find other clients to work for. And that's not a threat. Many of the most qualified firms have already left the market. If COMM thinks they have too many consultants that charge more than they are worth now, I suggest that when the balance of the good firms leave the market the real costs of the program will escalate. COMM may save a few dollars up front, but only at the very real risk of paying a far larger penalty in the long term as the result of poor quality work and poor decision making.

COMM believes that claimants have no incentive to control costs and therefore consultants are overcharging for the work. They're half right. Claimants don't have any incentive to control costs. With a very small deductible that virtually every site closure exceeds, that's understandable. So let's just fix the problem. Let's agree on why claimants have no incentive and devise a program which provides that incentive.

As to the second half of the statement above: sure there are a few abusers of the program. But why punish the reputable firms? We don't charge our PECFA clients any more for our time than we charge anyone else – and neither do most firms. But once again, I would agree that consultants have no real incentive to control costs, except to meet the existing caps. Most of us are reputable and work diligently to address sites in a timely and cost-effective manner. That's the way we conduct all of our business. But it only takes a few bad apples to give us all a bad name. We would welcome a better way to encourage cost-sensitive conduct on projects – but the proposed caps are counterproductive to a quality result.

So, what should be done?

It's not fair to criticize without offering constructive alternatives, along with a sincere commitment to be part of the solution. In fact, the consultant community has offered literally dozens of ideas to COMM over the past several years – but for the most part those suggestions have never received serious consideration. I'll reiterate a few of the many ideas that have been offered:

Manage consultant costs by making the consultant a true team member, not simply by instituting arbitrary caps and requiring them to "absorb" required costs, which creates an adversarial relationship.

How do you do this? The answer's as close as your phone. Ask the DOT and DOA how they manage consultants. They've been doing it successfully for years. They ask for qualifications and then invite consultants whose expertise and business practices they respect to submit written technical proposals (not bids). Based on the technical proposals, and perhaps an interview, they select the consultant who they feel can best do the job. Then they negotiate a fair fee and work with that consultant throughout the project. There's absolutely no reason why COMM and the DNR can't assist PECFA claimants in a similar process to select consultants. This process offers distinct advantages:

- If COMM or DNR don't think a particular consultant is serving the program effectively, they simply don't invite them to submit a proposal. It's as simple as that. No justification needed, no potential lawsuits for unjust elimination from the program. COMM, DNR, and the claimant all go away satisfied they have the best consultant on board. This solves the problem COMM has with a few disreputable consultants charging exorbitant rates for their services.
- COMM and DNR both have enough experience to recognize a reasonably priced scope of work for these sites. So now they have a second tool to control consultant costs – but a tool that consultants will embrace as well. Yes, it may require a staff member or two to devote some time to this task, but it's a small price to pay for getting the best consultant for the job. Besides, it will undoubtedly cost less than what will be required to monitor the proposed 37 different “usual and customary” cost caps, the defined hourly rate caps for the different classification levels, the staff classification levels allowed to work on each program element, and the myriad of “unallowable” costs (which are still required to be performed, just not paid for).
- The consultant is not forced (or tempted) to cut corners in order to stay within untenable caps and still make a fair profit. The benefits to everyone should be obvious.
- The specific project, and only the project, pays for the costs of performing that project. If we are forced to work under unreasonable caps and must “absorb” into our overhead rate some of the legitimate (and required) costs of performing the work, those costs will be paid by all of our other clients through our increased overhead rate. Our firm works for both DOT and DOA – they will end up paying a share of the unallowable PECFA costs which must be included in our overhead rate. As will all of the cities, counties, towns and private clients we serve. Does that seem fair? Of course not. Legitimate project costs should be paid by the project they benefit. Is this how you believe government should control costs – by simply refusing to pay for work they require to be done? I seriously doubt it. But that's what COMM is proposing.

Eliminate unnecessary activities and streamline the process.

It's regulations, both from COMM and DNR, that define what services are required by consultants and what level of effort is required to reach the desired standards. Regulations drive the program, and its costs. If your administration is serious about saving significant amounts of money, you must eliminate conflicting objectives and procedures between COMM and DNR and address unnecessary regulatory requirements that produce unnecessary costs. Two quick examples:

- ◆ NR 700 requires consultants to prepare an investigative work plan prior to beginning work on a site. It's common knowledge that neither DNR nor COMM staff review them (we've been told that many times, directly by DNR staff). Why then is it required? Why are we spending PECFA dollars to produce them?
- ◆ Quarterly monitoring reports are not reviewed either. Yet each quarter, we must take time to prepare a separate report, analyze trends, prepare transmittal letters, and send the report to DNR – where they gather dust. Why not prepare just one report (with all the quarterly data) and submit it along with the request for closure? If something significant shows up in the meantime, the consultant can report it on an exception basis. Why are we spending PECFA dollars preparing multiple reports which are never read or utilized?

Provide the claimant with an incentive to control costs.

A simple co-payment schedule for the costs of the entire project will get their attention quickly, and they'll help COMM make sure consultant costs are both reasonable and controlled. The NR 169 program for dry cleaning cleanups has recognized that need. Why shouldn't PECFA? PMAW may not like it – but if reducing the cost of the program is the objective, this will be a far more effective approach. It'll take a little political courage, but it will get results.

Establish congruent environmental and fiscal goals.

It's pretty obvious to the consultant community that there is severe goal divergence between DNR and COMM. That's not to say that either is intentionally subverting the program – quite the contrary. They are both doing their jobs, as they see them. The problem is that their goals are fundamentally at odds with each other. The dynamic tension between these goals precludes the efficient achievement of the overall goal. Short of restructuring the entire program, I don't have a solution to offer – except to say that you are in the best position to reconcile policy between two government agencies.

We could go on and on with constructive suggestions which would save real dollars – if COMM is really interested. All they have to do is ask – all we ask is that they do so in a timely manner, not just a matter of days before stringent deadlines (which has been our experience in the past, and in this case).

Instead of working with the consultant community, it appears that COMM is bent on maintaining it's adversarial relationship. I fail to understand why. Other branches of state government learned long ago how to get the most out of their relationships with the consultant community –

in a win-win environment. Wouldn't you think that COMM would want to take advantage of some of that institutional experience? Why learn hard lessons over and over again?

On behalf of Ayres Associates and the consultant community in general, I guarantee that you would enjoy an enthusiastic reception if you were to request the consultant community's participation in a workshop to develop fair and effective revisions to, or complete restructuring of, the PECFA program. We want this program to work. We want to have a professional relationship with COMM and DNR. We will do our part, if you want our help.

Sincerely,

Owen Ayres & Associates, Inc.



Dean T. Schultz P.E.  
Executive Vice President

cc: Brenda Blanchard, Secretary, Department of Commerce  
Members, Legislative Joint Audit Committee