HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 841 Contaminated Sites
SPONSOR(S): Agriculture & Natural Resources Subcommittee; Drake
TIED BILLS: None **IDEN./SIM. BILLS:** SB 1302

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Agriculture & Natural Resources Subcommittee	9 Y, 0 N, As CS	Gregory	Blalock
2) Agriculture & Natural Resources Appropriations Subcommittee	9 Y, 1 N	Helpling	Massengale
3) State Affairs Committee			

SUMMARY ANALYSIS

In 2003, the Legislature created the "Global Risk-Based Corrective Action" or "Global RBCA" statute, requiring risk-based corrective action (RBCA) to be applied to all contaminated sites in Florida. RBCA is a process that bases remedial action for contaminated sites on potential human health effects resulting from exposure to chemical compounds. RBCA utilizes site-specific data, modeling results, risk assessment studies, institutional controls (i.e., deed restrictions limiting future use to industrial), engineering controls (such as placing an impervious surface over contaminated soils to prevent human exposure), or any combination thereof. The goal of RBCA in Florida is to provide for a flexible site-specific cleanup process that reflects the intended use of the property following cleanup, while maintaining adequate protection of human health, safety, and the environment. Persons Responsible for Site Rehabilitation must follow the Department of Environmental Protection's (DEP's) RBCA procedure when rehabilitating a contaminated site.

This bill amends the Global RBCA statute to:

- Add a definition of "background concentration" to include concentrations of contaminants that are naturally occurring or the result of anthropogenic (human) impacts unrelated to the discharge of pollutants or hazardous substances at the contaminated site undergoing rehabilitation. Currently, DEP may not require site rehabilitation to achieve a contamination target level (CTL) for any contaminant more stringent than the naturally occurring background contamination. Under this change, responsible parties would not be required to achieve a CTL for any contaminant more stringent than any background contamination naturally occurring or resulting from the anthropogenic impacts unrelated to the discharge of pollutants or hazardous substances at the contaminated site undergoing rehabilitation;
- Require DEP's Global RBCA rule to include protocols for long-term natural attenuation for site rehabilitation;
- Require DEP to consider the interactive effects of contaminants, including additives, synergistic, and antagonistic effects when determining what constitutes a rehabilitation program task;
- Create an exception when applying state water quality standards for determining what constitutes a rehabilitation program task;
- Allow the use of risk assessment modeling and probabilistic risk assessment to create site-specific alternative cleanup target levels (CTLs); and
- Allow the use of alternative CTLs without institutional controls if certain conditions exist.

The bill appears to have an insignificant negative fiscal impact on the state, which can be absorbed within existing resources; an indeterminate positive fiscal impact on the private sector; and no fiscal impact on local governments. See Fiscal Analysis & Economic Impact Statement for more detail.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Present Situation

Global RBCA

Prior to 2003, Florida used Risk Based Corrective Action (RBCA) at contaminated sites under the following Department of Environmental Protection (DEP) programs: the Petroleum Restoration Program, the Brownfield Program, and the Drycleaning Facility Restoration Program (collectively "program sites").[1] The program sites made up approximately 90 percent of all of the contaminated sites in Florida.[2]

RBCA is a process that bases remedial action for contaminated sites on potential human health effects resulting from exposure to chemical compounds.[3] RBCA utilizes site-specific data, modeling results, risk assessment studies, institutional controls (such as deed restrictions limiting future use to industrial), engineering controls (such as placing an impervious surface over contaminated soils to prevent human exposure), or any combination thereof.[4]

DEP managed non-program sites under the Contamination Assessment Plan/Remedial Action Plan process (CAP/RAP) set forth in the Model Corrective Action for Contaminated Site Cases guidance document.[5] These sites were required to be remediated to default cleanup target levels (CTLs).[6] A CTL is the concentration of a contaminant identified by an applicable analytical test method, in the medium of concern (e.g., soil or water), at which a site rehabilitation program is deemed complete.[7] DEP developed the CTLs based on human health and aesthetic factors.[8] Aesthetic considerations include altered taste, odor, or color of the water.[9] This approach offered little flexibility to provide site-specific remediation strategies, was inefficient,[10] and created a significant expense.[11]

In 2003, the Legislature created s. 376.30701, F.S., commonly referred to as "Global Risk-Based Corrective Action" or "Global RBCA," which required RBCA to be applied to all contaminated sites in Florida to meet CTLs.[12] Chapter 62-777, F.A.C., provides the default CTLs and a methodology for RBCA.[13]

In 2005, DEP adopted rules to implement Global RBCA.[14] The goal was to provide for a flexible site-specific cleanup process that reflected the intended use of the property following cleanup, while maintaining adequate protection of human health, safety, and the environment.[15]

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[1] Charles F. Mills III, Global RBCA: Its Implementation, Foundation in Risk-Based Theory, and Implication, 22 J. Land Use & Envtl. L. 101, 116 (Fall 2006).
[2] Id. at 117.
[3] Id. at 102 (Fall 2006).
[4] Ralph A. DeMeo, Michael P. Petrovich, Christopher M. Teal, *Risk-Based Corrective Action In Florida: How Is It Working?*, the Florida Bar Journal, January 2015, at 47.
[5] Mills, *supra* note 1, at 118. In 2005, the Fifth District Court of Appeals found this guidance document to be an unpromulgated rule, and therefore invalid. Kerper v. Department of Environmental Protection, 894 So.2d 1006 (Fla. 5th DCA 2005).
[6] DeMeo, *supra* note 4, at 47.
[7] Section 376.301(7), F.S.
[8] Florida Department of Environmental Protection, *Technical Report: Development of Cleanup Target Levels (CTLs) For Chapter 62-777, F.A.C.*, at 7, incorporated by reference in Rule 62-777.100, F.A.C.
[9] Id.
[10] DeMeo, *supra* note 4, at 47.
[11] Mills, *supra* note 1, at 133.
[12] Id. at 102.
[13] Id. at 118.
[14] DeMeo, *supra* note 4, at 47.

The ultimate goal for any contaminated site is for DEP to issue it a No Further Action (NFA) order. Upon discovery of a contaminant, DEP must be notified.[16] The Person Responsible for Site Rehabilitation (responsible party) must commence site assessment within 60 days of discovery of a discharge to determine the extent of contamination and facilitate selection of an appropriate remediation strategy.[17] This includes establishing any background concentrations of contaminations.[18] "Background concentrations" are concentrations of contaminants that are naturally occurring in the groundwater, surface water, soil, or sediment in the vicinity of the site.[19] DEP cannot require site rehabilitation to achieve a CTL for any contaminant more stringent than the naturally occurring background contamination.[20]

Once a responsible party completes a site assessment, it has several Risk Management Options (RMOs) to achieve NFA. Under the RMO options, the responsible party must either rehabilitate the site to the default CTLs established in chapter 62-777, F.A.C., or to the alternative CTLs established through a Risk Assessment. For alternative CTLs, future site use and exposure characteristics differ greatly from those utilized to calculate the default CTLs such that the default CTLs "do not accurately correspond to the risk goals for that site."[21]

Under RMO I, DEP will issue a NFA order without institutional controls or without institutional and engineering controls if the Exposure Point Concentration (EPC) for all detected chemicals do not exceed the less stringent of their corresponding default residential CTLs or their background concentration.[22] Under RMO II, DEP will grant a NFA order, subject to institutional controls, if the EPCs for all detected chemicals do not exceed default commercial/industrial CTLs or alternative CTLs adjusted for site-specific geologic or hydrogeologic conditions.[23] Under RMO III, DEP will grant a NFA order, subject to institutional controls, if the EPCs for all detected chemicals do not exceed alternative CTLs adjusted for site-specific exposure scenarios determined in the exposure assessment.[24]

Several methods may be used to achieve site rehabilitation. Section 376.30701(2), F.S., requires DEP's rule to include protocols for natural attenuation as a method for site rehabilitation. Natural attenuation allows natural processes to contain the spread of contamination and reduce the concentrations of contaminants in contaminated groundwater and soil.[25] Natural attenuation processes may include sorption, biodegradation, chemical reactions with subsurface materials, diffusion, dispersion, and volatilization.[26] This practice may be used depending on individual site characteristics, current and projected use of the land and groundwater, the exposed population, the location of the contamination plume, the degree and extent of contamination, the rate of migration of the plume, the apparent or potential rate of degradation of contaminants through natural attenuation, and the potential for further migration in relation to the site's property boundary.[27] DEP may approve natural attenuation if:

- Free product is not present or free product removal is not feasible;
- Contaminated soil is not present in the unsaturated zone;
- Contaminations present in the groundwater above background concentrations or applicable CTLs are not migrating beyond the temporary point of compliance or vertically;

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[15] Id.
[16] Rule 62-780.210, F.A.C.
[17] Rule 62-780.600, F.A.C.
[18] Rule 62-780.600(3)(d), F.A.C.
[19] Rule 62-780.200(3), F.A.C.
[20] Section 376.30701(2)(g)1., F.S.
[21] Florida Department of Environmental Protection, *Technical Report: Development of Cleanup Target Levels (CTLs) For Chapter 62-777, F.A.C.*, at 43-44, incorporated by reference in Rule 62-777.100, F.A.C.
[22] Mills, *supra* note 1, at 125; Rule 62-780.680(1), F.A.C.
[23] Id.; Rule 62-780.680(2), F.A.C.
[24] Id.; Rule 62-780.680(3), F.A.C.
[25] Section 376.301(24), F.S.
[26] Id.
[27] Rule 62-780.690(1), F.A.C.

- The characteristics of the contaminant and its transformation products are conducive to natural attenuation; and
- One of the following is met:
    - The contaminated site is anticipated to meet NFA criteria in 5 years or less as a result of natural attenuation, the background concentrations or applicable CTLs are not exceeded at the temporary point of compliance, and contaminant concentrations do not meet certain criteria; or
    - The appropriateness of natural attenuation is demonstrated by:
        - A technical evaluation of the groundwater and soil; and
        - A scientific evaluation of the contamination plume migration, an estimate of the annual reduction in contaminant concentrations, and the estimated time to meet NFA.[28]

Contaminated Site Liability

Under s. 376.308(1)(a), F.S., DEP may hold a person liable for any discharge or polluting condition if the person caused the discharge or polluting condition or owned the facility at the time the discharge occurred. Under ss. 376.308(1)(b) and 403.707(4), F.S., the following persons can be held liable for all costs of removal or remedial action incurred by DEP and damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from the release or threatened release of a hazardous substance:

- Owners and operators of a facility;
- Persons who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substance was disposed of;
- Any person who by contract arranged for the disposal of a hazardous substance; and
- Any person who accepts or has accepted any hazardous substances for transport to disposal or treatment facilities or sites.

DEP does not need to plead or prove negligence in any form or matter in these cases.[29] DEP must only plead and prove that the prohibited discharge or other polluting condition occurred.[30] Thus, this is a strict liability statute.

Persons potentially liable for a discharge, polluting condition, or release may only use the defenses set forth in the statutes.[31] To avoid liability persons must plead and prove the occurrence was solely the result of:

- An act of war;
- An act of government;
- An act of God; or
- An act or omission of a third party.[32]

While the first three defenses are straight forward to plead and prove, the third party defense may only be used when the defendant proves by a preponderance of the evidence that:

- The defendant exercised due care with respect to the hazardous waste concerned, taking into consideration the characteristics of such biomedical or hazardous waste, in light of all relevant facts and circumstances; and
- The defendant took precautions against foreseeable acts or omissions of any such third party and against the consequences that could foreseeably result from such acts or omissions.

These requirements are imposed on owners of contaminated sites because they are in the best position to protect themselves from the indemnities of the seller through pre-purchase due diligence and negotiation.[33]

[28] Rule 62-780.690(1), F.A.C.
[29] Section 376.308(1), F.S.
[30] Id.
[31] Id.; Section 403.727(4), F.S.
[32] Sections 376.308(2) and 403.727(5), F.S.

In addition to these defenses, in the case of a discharge of petroleum, petroleum products, or drycleaning solvents, the owner of the facility may escape liability by demonstrating that he or she did not cause or contribute to the discharge, and that he or she did not know of the polluting condition at the time the owner acquired title.[34] Under this "innocent landowner defense," the defendant must prove by a preponderance of the evidence that that he or she undertook, at the time of acquisition, all appropriate inquiry into the previous ownership and use of the property consistent with good commercial or customary practice in an effort to minimize liability.[35] When considering whether to apply the innocent landowner defense, a judge must take into account:

- Any specialized knowledge or experience on the part of the defendant;
- The relationship of the purchase price to the value of the property if uncontaminated;
- Commonly known or reasonably ascertainable information about the property;
- The obviousness of the presence or likely presence of contamination at the property; and
- The ability to detect such contamination by appropriate inspection.[36]

Effect of Proposed Changes

This bill makes several revisions to the Global Risk-Based Corrective Action statutes.

The bill amends s. 376.301, F.S., to add a definition of "background concentration." This definition includes concentrations of contaminants that are naturally occurring **or the result of anthropogenic (human) impacts** unrelated to the discharge of pollutants or hazardous substances at the contaminated site undergoing rehabilitation. The bill also makes corresponding changes in ss. 376.30701(2)(g)1. and 376.30701(2)(i)1., F.S., to remove references to "naturally occurring" in front of "background concentration."

Currently, these provisions prohibit DEP from requiring site rehabilitation to achieve a CTL for any contaminant more stringent than the background contamination. As discussed above, the rule only includes naturally occurring concentrations of contaminants in its definition of "background concentration." Under the proposed change, human-created contamination may be treated as background contamination as well as naturally occurring contaminants. The change is similar to the EPA's policy for addressing background concentrations. In certain situations, the EPA will not require rehabilitation below naturally occurring or anthropogenic background concentrations.[37] The EPA guidance requires that the anthropogenic background contamination be unrelated to the release of hazardous substances at the contaminated cite.[38] Under the proposed change, responsible parties would only be required to rehabilitate their contaminated sites for the discharge or pollutants or hazardous substances at the contaminated site undergoing rehabilitation.

The bill also amends s. 376.30701(2), F.S., to require DEP's Global RBCA rules to include protocols for long-term natural attenuation. The bill also makes a corresponding change to s. 376.301, F.S., to add a definition of "long-term natural attenuation" to mean natural attenuation approved by DEP as a site rehabilitation program task that lasts more than five years. As discussed above, Rule 62-780.690, F.A.C., limits natural attenuation to a five-year period. However, natural attenuation may be permitted if the appropriateness of natural attenuation is demonstrated through technical and scientific evaluation. Thus, this change would appear to be consistent with the rule.

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[33] Aramark Uniform and Career Apparel, Inc., et al. vs. Easton, 894 So. 2d 20, 25 (Fla. 2004)
[34] Section 376.308(1)(c), F.S.
[35] Id.
[36] Id.
[37] *See* Environmental Protection Agency, *Transmittal of Policy Statement: "Role of Background in CERCLA Cleanup Program" OSWER 9285.6-07P* (May 2002), available at http://www.epa.gov/oswer/riskassessment/pdf/role.pdf (last visited March 2, 2015); Environmental Protection Agency, *Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites OSWER 9285.7-41* (September 2002), available at http://www.epa.gov/oswer/riskassessment/pdf/background.pdf (last visited March 2, 2015).
[38] Id.

The bill amends s. 376.30701(2)(e), F.S., to require DEP to consider the interactive effects of contaminants, including additive, synergistic, and antagonistic effects when determining what constitutes a rehabilitation program task. Rule 62-780.650(1)(c)3., F.A.C., allows this methodology when creating a risk characterization as part of a risk assessment. Thus, this change would appear to be consistent with the rule.

The bill amends s. 376.30701(2)(g)2., F.S., to create an exception when applying state water quality standards in determining what constitutes a rehabilitation program task. Currently, the statute requires that when surface waters are exposed to contaminated groundwater, the more protective groundwater or surface water standard CTL must be applied. The bill waives this requirement when it has been demonstrated that contaminants do not cause or contribute to the exceedance of the applicable surface water criteria.

The bill amends ss. 376.30701(2)(g)3. and 376.30701(2)(i)3., F.S., to allow the use of risk assessment modeling and probabilistic risk assessment (PRA) to create site-specific alternative CTLs. PRA is a risk assessment that yields a probability distribution for risk, generally by assigning a probability distribution to represent variability or uncertainty in one or more inputs to the risk equation.[39] This method is different from the point estimate risk assessment for single values because it uses multiple variables.[40] The EPA uses this new method of risk assessment when evaluating risk at contaminated sites it regulates.[41] Rule 62-780.650(3), F.A.C., allows the use of PRA to perform risk assessment when establishing alternative CTLs. Thus, this change would appear to be consistent with the rule.

The bill also amends s. 376.30701(2)(g)3., F.S., to allow the use of alternative CTLs without institutional controls if:

- The only CTLs exceeded are the groundwater CTLs derived from nuisance, organoleptic,[42] or aesthetic considerations;
- Concentrations of all contaminants meet the state water quality standards or the minimum criteria, based on the protection of human health, public safety, and the environment;
- All of the established groundwater CTLs for the contaminated site are met at the property boundary;
- The responsible party demonstrated that the contaminants will not migrate beyond the property boundary at concentrations that exceed the groundwater CTLs established for the contaminated site;
- The property has access to and is using an offsite water supply, and an unplugged private well is not used for domestic purposes; and
- The property owner does not object to the NFA proposal to DEP or the local pollution control program.

Section 376.81(1)(g)3., F.S., already allows use of this procedure for Brownfield contaminated site. This change may require amendment of Rule 62-780.680, F.A.C.

Lastly, the bill amends s. 287.0595(1)(a), F.S., to update a reference to the new numbering in s. 376.301, F.S.

B. SECTION DIRECTORY:

Section 1. Amending s. 376.301, F.S., relating to definitions used in ss. 376.30-376.317, 376.70, and 376.75, F.S.

Section 2. Amending s. 376.30701, F.S., relating to application of risked-based corrective action principles to contaminated sites.

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[39] Environmental Protection Agency, *Risk Assessment Guidance for Superfund: Volume III – Part A, Process for Conducting Probabilistic Risk Assessment at 1-3* (December 2001) available at http://www.epa.gov/oswer/riskassessment/rags3adt/ (last visited March 2, 2015).

[40] Id. at 1-7.

[41] *See* Id.

[42] "Organoleptic" is defined as being, affecting, or relating to qualities (as taste, color, odor, and feel) of a substance (as a food or drug) that stimulate the sense organs.

Section 3. Amending s. 287.0595, F.S., relating to pollution response action contracts.

Section 4. Providing an effective date of July 1, 2015.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

The bill appears to have an insignificant negative fiscal impact on DEP because the department will likely need to revise their rules as a result of the statutory changes in the bill. The impact can be absorbed by existing agency resources.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill will likely have an indeterminate positive economic impact on persons or entities that must rehabilitate a contaminated site. The amounts and types of contaminates, as well as the underlying geology, vary at each site resulting in a wide range of costs associated with site rehabilitation. However, property owners will no longer be required to rehabilitate a site for background concentrations caused by human activities unrelated to the discharge of pollutants or hazardous substances at the contaminated site undergoing rehabilitation. Further, these property owners will not be required to use institutional controls when an alternative CTL is used for site remediation in certain situations. Therefore, there will likely be a reduced cost associated with site cleanup.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

The bill does not appear to require counties or municipalities to take an action requiring the expenditure of funds, reduce the authority that counties or municipalities have to raise revenue in the aggregate, nor reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

DEP has sufficient rulemaking authority to amend chapter 62-780, F.A.C., to conform to changes made in the statute.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On March 10, 2015, the Agriculture & Natural Resources Subcommittee adopted an amendment to the bill and reported the bill favorably as a committee substitute. The amendment revised the bill to amend s. 376.301, F.S., to change the definition of "background contamination" to include concentrations of contaminants that are naturally occurring or the result of anthropogenic (human) impacts unrelated to the discharge of pollutants or hazardous substances at the contaminated site undergoing rehabilitation. This change appears to be consistent with EPA guidance.

This analysis is drafted to the bill as amended and passed by the Agriculture & Natural Resources Subcommittee.