ATTACHMENT 1
DNR Response to Comments
Proposed Revisions to chs. NR 700 to 754, Wis. Adm. Codes
Board Order RR-04-2011

I. General Summary

The Department of Natural Resources, Bureau for Remediation and Redevelopment held 5 public hearings in May, 2012 to obtain comments on proposed revisions to chs. NR 700 to 754. The hearings were held in Madison, Milwaukee, Green Bay, Rhinelander and Eau Claire. A total of 20 people attended the 5 hearings. Of these 20 people, 9 indicated their position was "as interest may appear", 3 indicated "in support" and 8 did not mark a position on the slip. Written comments were accepted until May 31, 2012. In addition, comments from the Rules Clearinghouse were received on April 12, 2012. This document summarizes all of the comments received and the Department's response. Several minor formatting changes are addressed first, then the comments received by the Rules Clearinghouse and then are followed by the comments received during the public comment period.

II. Formatting Changes

The following rule changes were made in response to a change in the closure request and approval process after the draft rules went out for public comment. The rule changes are not "substantive", in that they were formatting requirements for certain submittals (limits on paper size, and use of one PDF). They are no longer needed, and have been removed from the draft rule. The remaining language was renumbered. The changes made to the draft rule language include:

1. NR 708.17 (4) (a) and (Note):

(4) DOCUMENTATION. (a) *Format Requirements*. For sites required to be included on the department database following a response action, the local governmental unit or economic development corporation shall submit the information in par. (b) to the department, in accordance with s. NR 700.11 (3g). ~~In addition, paper copies may not be larger than 11 by 17 inches.~~ Maps and cross-sections shall be to scale, and include a graphic scale and a north arrow.

Note: Under s. NR 700.11 (3g), one paper copy and one electronic copy shall be submitted to the department, unless otherwise directed by the department. Electronic copies files may not be locked or password protected. All documents ~~shall be contained within a single portable document format file (PDF), and~~ shall have a minimum resolution of 300 dots per inch. All documents except deeds and legal descriptions shall be digital format versions rather than scanned versions. Deeds and legal descriptions may be scanned versions. All information submitted shall be legible.

2. NR 716.15 (1) (b) (Note)

~~**Note:** Ch. NR 716 does not include a size limit on paper copies. However, ch. NR 726 includes a size limit of 11 x 17 inches for paper copies submitted for inclusion on the department database.~~

3. NR 726.11 (1) (intro.)

(1) GENERAL REQUIREMENTS. Responsible parties or other persons requesting closure for any site or facility meeting the criteria in s. NR 725.05 (2) or as required under s. NR 726.13(1) (c), shall submit the applicable information in ~~a separate attachment to~~ the case closure request. The information shall be in the order specified in the closure request form.

4. NR 726.11 (1) (b) 2., 4.

(b) Information shall be submitted in accordance with s. NR 700.11 (3g), unless otherwise directed by the department. Providing illegible information may result in a submittal being considered incomplete until corrected.

Note: Under s. NR 700 (3g), "one paper copy and one electronic copy of each plan or report shall be submitted to the department, unless otherwise directed by the department. The electronic copy shall be submitted on optical disk media and may not be submitted as electronic mail attachments unless specifically approved in advance by the department. Electronic copy files shall have a minimum resolution of 300 dots per inch, and may not be locked or password protected. The department may request that the electronic copy of sampling results be submitted in a format that can be managed in software. An electronic copy of certain types of voluminous attachments or appendices may be substituted for the paper copy, if specifically approved in advance by the department. All documents shall be digital format versions rather than scanned versions except documents that are only available as scanned versions. Deeds and legal descriptions may be scanned versions. All information submitted shall be legible."

III. Recent Statutory Update

The following non-substantive change was made to s. NR 734.03 (4), due to a change in statutory citation and in the agency with administrative authority.

NR 734.03 (4) **(4)** "Minority business" means a business certified by the department of ~~development~~ administration pursuant to s. ~~560.036~~16.287 (2), Stats.

IV. Comments from the Rules Clearinghouse

1. Statutory Authority

a. *The rule relies, in numerous instances, on the discretion of the department to provide exceptions and accept alternatives to the requirements prescribed by the rule. The department should review the use of this discretion in light of the general purpose of rule-making to provide a comprehensive source of information on the administration of state*

laws, as well as the department's obligation under s. 227.10 (1), Stats., to promulgate as a rule each statement of general policy and each interpretation of a statute which it specifically adopts to govern its enforcement of administration of that statute.

Response: The subject rule language is generally used for limited, unusual circumstances. Most of these rules have been in place for over 15 years, and the language has allowed the Department flexibility to address unusual and unexpected situations. As certain situations became more common, we drafted specific rule language to deal with them. To date, this flexibility has not resulted in any issues being raised regarding rule implementation.

b. *The department should list s. 299.45 (7), Stats., in the statutory authority section of the rule analysis, and add an explanation of the agency's authority under s. 292.68 (11), Stats., with respect to the changes proposed in this rule-making order.*

Response: The Statutory Authority Section has been revised to include s. 292.68 (11), Stats.

2. Form, Style and Placement in Administrative Code

a. In the introductory clause of the rule, the enumeration of provisions treated should include a more specific list of sections affected and should be updated to reflect the changes recommended below.

Response: The introductory clause has been revised to include specific sections affected and included in the rule order.

b. *The rule should be reviewed in its entirety for appropriate use of strike-throughs and underscores to indicate amendment of rule provisions and compliance with other instructions relating to the amendment of rule provisions. [See s. 1.06, Manual.]*

Response: The rules and rule order have been reviewed and revised where appropriate.

c. *In SECTION 10, why does the phrase "General Requirements" appear in the rule text? The phrase already exists as the title for ch. NR 700.*

Response: The title was removed from rule order text.

d. *In s. NR 700.01 (2), the citations for statutory authority should appear in numerical order, with ch. 160, Stats., appearing before ch. 292, Stats.*

Response: The rule and rule order have been revised.

e. *Section NR 700.03 (1a) should be created as s. NR 700.03 (1g) and s. NR 700.03 (1m) should be s. NR 700.03 (*1r).

Response: The rule and rule order have been revised.

f. *In SECTION 16, the department refers to "federal authorities." Would it be more appropriate to refer to federal laws? Are the acronyms used by the department defined prior to their use?*

Response: "Authorities" was changed to "laws". The acronyms are defined in s. NR 700.03, Definitions.

g. *Under SECTION 20, the referenced rule text should be limited to s. NR 700.03 (2) (a) or s. NR 700.03 (2) should be fully included in the treatment clause and rule text. Generally, the*

rule should be reviewed in its entirety to ensure that the referenced rule text matches the treatment clause in each SECTION. In some instances it may be appropriate to reduce the referenced rule text to match the treatment clause; in other instances, it may be appropriate to maintain the current referenced text and modify the treatment clause to match the referenced text.

Response: Section 20 was limited to s. NR 700.03 (2) (a). The rule order was reviewed, and changes were made where appropriate.

h. *Section NR 700.03 (7m) should be s. NR 700.03 (6m).*

Response: The rule and rule order were revised.

i. *In s. NR 700.03 (11m) Note, the department should provide a more specific reference to the Internet location of the BRRTS than "on the web".*

Response: The note has been rewritten, and parentheses have been added to help clarify that "BRRTS on the Web" (BOTW) is the name of the tracking system, which is available to the public on the internet. The link takes the user to an introductory web page which provides a description of both BOTW and RR Sites Map.

j. *Section NR 700.03 (45g) should be s. NR 700.03 (45e).*

Response: The rule and rule order were revised.

k. *In s. NR 700.03 (49r) Note, the reference to "chapter NR 720" should be written "ch. NR 720".*

Response: The rule and rule order were revised.

l. *The rule should be reviewed in its entirety for use of internal and external cross-references as prescribed under ss. 1.03 and 1.07, Manual.*

Response: Internal and external cross-references were checked for compliance with the manual.

m. *Section NR 700.03 (51) should be rewritten in the style described in s. 1.03 (3) and (4), Manual. The rule should be reviewed in its entirety and should conform to the style described in these sections.*

Response: The definition was rewritten following the style described in s. 1.04 (3) and (4), Manual (section 42). The rules were reviewed and checked for compliance with the manual.

n. *Section NR 700.03 (52m) should be revised. The department should consider the distinction between "means" and "includes" as described in s. 1.01 (7) (c), Manual. Additionally, the phrase "for the purposes of this chapter" is either superfluous (if the term is used only in ch. NR 700) or misleading (if the phrase is intended to apply differently in different chapters, it should be defined separately in each chapter).*

Response: The definition has been revised.

o. *Section NR 700.03 (64m) should be s. NR 700.03 (64g) and s. NR 700.03 (65m) should be s. NR 700.03 (64r). The definition of "TSCA" should include a more specific reference to the U.S. Code than "15 USC".*

Response: The definitions have been renumbered. The TSCA reference has been updated to

"15 USC 2601-2692".

p. *In s. NR 700.03 (66) Note, the cross-reference to Department of Commerce rules should be updated to reflect the dissolution of that department. The rule should be reviewed in its entirety for the need to update other, similar cross references.*

Response: The rules have been updated to include the new name, Department of Safety and Professional Services.

q. *The terms defined in s. NR 700.03 (66t) and (66w) should be switched so that they are in alphabetical order.*

Response: The terms have been switched.

r. *What standards will the department use to determine whether other requirements than those listed under s. NR 700.11 (1) (a), including report submission frequency, will be required of responsible parties? The rule should be reviewed in its entirety for other instances in which the department is given flexibility to impose different requirements than those listed in the rule without specification as to how or when such flexibility will be exercised. Throughout the rule, the department should avoid the use of vague exceptions, alternatives, and opportunities for department discretion and should instead include more specific details regarding those exceptions, alternatives, and exercises of discretion within the administrative code.*

Response: The department makes these decisions on a case-by-case basis, to account for unusual circumstances.

s. *In SECTION 64, if sub. (2) is repealed, par. (2) (a), and all of the other provisions under sub. (2), will be repealed. It is not appropriate to separately list par. (2) (a).*

Response: The section was revised to clarify that NR 700.11(2) (intro) and a. are repealed.

t. In SECTION 66, does the department intend to refer to "par. (a) 2. to 4." instead of "subds. 2. to 4."?

Response: Yes – rule and rule order changed.

u. The changes provided in SECTION 68 and SECTION 70 should be included in a single SECTION. (Note that the proposal as drafted does not repeal all of s. NR 700.11 (3) in SECTION 68 yet it creates a new s. NR 700.11 (3) in SECTION 70.)

Response: Revision of NR 700.11 (3) was all included in one section, and the new rule language was renumbered (3g) and (3r).

v. *SECTIONS 69 and 70 are out of numerical order.*

Response: The sections have been corrected.

w. *SECTIONS 71 through 73 are out of order and should be redrafted. All actions affecting a particular subsection or other division of the code should be contained in one SECTION where possible. The rule should be reviewed in its entirety for other instances in which a single division of the code is affected in multiple SECTIONS.*

Response: These have been combined into one section. Additional sections in NR 700 and 706 were also consolidated. The rule order has been revised to account for multiple, consecutive changes in a single section.

x. *In the explanatory text following SECTION 73, do not refer to the recreation of the applicable provisions in SECTION 195 as "renumbering". The rule should be reviewed in its entirety for use of appropriate treatment clauses. [s. 1.04 (1) (b), Manual.]*

Response: The treatment clauses have been changed to reflect the appropriate wording. The rule order has been revised to use appropriate treatment clauses.

y. *The repeal of titles of subchapters should be done in a consistent manner (compare for example, SECTIONS 74, 75, 88, and 103).*

Response: The repeal of subchapter titles has been revised to be done by separate treatment sections throughout.

z. *In multiple instances in the rule, provisions of existing code are renumbered and the previous number is re-used for a new provision. It is best to avoid this practice and to instead insert new provisions between existing provisions. Section 1.03 of the Manual should be reviewed for direction as to how to correctly accomplish these changes, focusing in particular on sub. (5) (a) and (b). See, for example, SECTIONS 78 through 95 and 182 through 198 of the proposal. The entire rule should be reviewed with respect to this comment.*

Response: NR 700, 706, 716, 722, 724 and 738 were revised to correct the renumbering issues.

aa. *When renumbering is appropriate, the substantive provision below the SECTION description should not show the strike-through and underline change of the number (see, for example, SECTIONS 92 and 95). [See the examples following s. 1.04 (2), Manual.]*

Also, lower divisions below a renumbered division should not show separate renumbering treatment. For example, SECTIONS 210 through 214 should be combined into a single section under which s. NR 716.15 (2) (g) is renumbered and revised to include all of the subsequent listed changes. The entire rule should be reviewed for other similar examples and revised accordingly.

Response: Sections regarding NR Ch. 716 have been revised, and the rule order has been reviewed and revised to correct the format for renumbering for multiple chapters.

bb. *Each separate treatment should be indicated by a numbered SECTION (see the material following SECTION 92 for the absence of a numbered SECTION). Conversely, no material follows SECTION 498. The rule should be reviewed in its entirety with respect to this comment.*

Response: The rule order has been revised to ensure that all material is covered by a numbered Section.

cc. *SECTION 97 appears to create introductory material rather than amending introductory material that already exists, rendering the treatment clause inaccurate. Additionally, the style of the introductory material does not conform to s. 1.03 (3), Manual.*

Response: the introductory clause has been revised to conform to s. 1.03(3), Manual.

dd. *It is not appropriate to end a list that begins with "including" with a provision such as "and other sources not specifically identified herein." (See, for example, SECTION 108.) It is*

also not appropriate to use the phrase "including, but not limited to." (See, for example, SECTION 131.) [s. 1.01 (7) (c), Manual.] The entire rule should be reviewed with respect to this comment and revised accordingly.

Response: The language for NR 706.11 has been revised to include the lists in Notes, rather than rule language. The phrase "but not limited to" has been removed from chs. NR 700, 708, 714, 716, 725, 726, 727 and 750.

ee. *The rule should be clarified as to whether the Note following s. NR 708.11 (1), as amended, should follow s. NR 708.11 (1) (a) or (b).*

Response: the treatment clause has been clarified; the Note follows (a).

ff. *If the requirements included in s. NR 708.17 (4) (a) Note are intended to be enforceable requirements, they must be included in a substantive rule provision. The rule should be reviewed in its entirety to ensure that any material intended to have the force of law is not placed in a Note.*

Response: The Note (and rule) references s. NR 700.11(3g), which contains the applicable requirements. Notes throughout the rule have been reviewed and revised to ensure they are explanatory in nature.

gg. *When a provision is created, do not underline the text. "Recreating" a provision is not appropriate. (See for example, SECTIONS 290 and 294.) When a provision is truly being completely eliminated and replaced by a new provision, it should be "repealed and recreated". The rule should be reviewed in its entirety for similar changes.*

Response: Underlining of created provisions has been removed. Changes to treatment clauses ("creating" vs. "recreating") were made throughout the rule order.

hh. *If a title is used for one provision in a set of provisions, a title must be used for all in the set. (See, for example, s. NR 720.05.) The rule should be reviewed in its entirety for other instances where additional titles are necessary.*

Response: The rules have been reviewed and revised as appropriate.

ii. *Section NR 720.07 (2) (d) 2. must include an introductory phrase such as "all of the following" or "any of the following". The rule should be reviewed in its entirety for other instances of inappropriate introductory provisions. (See, for example, multiple instances under s. NR 720.11 (3).) [s. 1.03 (3), Manual.]*

Response: The section has been revised, and other rules sections have been revised accordingly, namely NR 716 and 720.

jj. *The meaning of the phrase "rule series" in s. NR 722.02 (2) should be clarified.*

Response: The rule was revised to read "ch. NR 700 to 754".

kk. *SECTION 375 is either numbered wrong or misplaced in the proposal.*

Response: The reference has been corrected to NR 724.02 (1) (c), rather than N R 722.02 (1) (c).

ll. *Titles of paragraphs may not contain substantive requirements. (See s. NR 727.07 (1) (a) through (g).)*

mm. In s. NR 746.03 (5), it is unnecessary to list the Act that created a particular statute.

Response: NR 727.07 (1) has been revised to clarify the actions, without titles. NR 746.03(5) has been revised to remove the name of the Act.

5. Clarity, Grammar, Punctuation and Use of Plain Language

a. In s. NR 169.05 (29g) Note 1., the department should revise the format of its exponential representation of vapor concentration to use an appropriate superscript.

Response: The exponent has been corrected.

b. *Under s. NR 169.13 (2) (f) 3., consider requiring the use of existing building components to the extent "practicable" instead of to the extent "possible" if it is your intent to allow the department to decide whether it makes economic sense to reclaim structures or materials.*

Response: This change was made.

c. *When terms defined in a code chapter are used elsewhere in the chapter, do not cross-reference the definition. See, for example, s. NR 169.15 (1), which should read: "The department project manager shall designate each site as a high priority site, a medium priority site, or a low priority site." Similar modification should be made to s. NR 169.15 (2).*

Response: The reference to the definitions was removed.

d. *The rule should be reviewed in its entirety for grammatical errors. For example, a comma should precede "Stats." in s. NR 700.02 (2) Note and an errant letter "r" should be removed from the treatment clause of SECTION 20. A period should end the definition of "property boundary" in s. NR 700.03 (45m).*

Response: These changes were made. The rule order was reviewed and changes made.

e. *In SECTION 24, the Note should be revised for clarity.*

Response: The note in NR 700.03 (6m) was revised.

f. *In s. NR 700.03 (39m), the department should clarify its intent regarding the reference to "residential setting" as it relates to the definition of "facility".*

Response: The definitions under NR 700.03 (39m) and (49g) were revised to replace the word "facility" with "setting", as "facility" means either a solid waste or mining operation in this rule series.

g. *The definition of "property" under s. NR 700.03 (45g) should be clarified. Note the inconsistencies between this definition and the definition of "property boundary".*

Response: The wording chosen reflects a need to (1) avoid having a situation such as a railroad right-of-way render a property non-contiguous and (2) discourage VPLE applicants from dividing a larger site into parcels and seeking a liability exemption for something less than the whole site.

h. *The definition of "sub-slab" under s. NR 700.03 (60m) should be clarified. A building's "lowermost foundation" and a building's "lowermost floor" are generally at different depths, and it is not clear whether a "foundation floor" is a recognized building component.*

Response: The definition was modified to remove the word “floor”.

i. *If it is the department’s intent to authorize the use of more than one of the means of identifying potentially responsible parties under s. NR 700.10, remove the word “one” from the (intro.) to that section.*

Response: This change was made.

j. *The changes to s. NR 706.03 (5), as renumbered, should be re-worded.*

Response: The wording of the definition for “petroleum product” has been reworded to clarify the intended uses.

k. *The definition of “economic development corporation” in SECTION 117 should be revised for clarity.*

Response: The definition was left as is, as changing it would add complexity, rather than clarity. Multiple statutes are referenced, creating the complexity.

l. *In s. NR 708.17 (3) (b) 1. and 2., it is not clear what difference is meant by “sites meeting par. (a)” and “sites that have been included on the department database”. If no difference is intended, these provisions should be consistent.*

Response: S. NR 708.17(3) (b) 1. is about the fee for adding a particular group of sites to the department database. S. NR 708.17(3) (b) 2. is about modifying information on the database, at some time after any type of site was added to the database. Par. 1 and 2 were left separate.

m. *In s. NR 708.17 (4) (b) 4., what is meant by “or as otherwise required by the department”?*

Response: In limited circumstances, the department may require an action not covered by the (typical) actions listed. To date, this has included methane monitoring (at a landfill). “On a case-by-case basis” was added.

n. *In SECTION 148, add “Chapter” before “NR 714”.*

Response: This change was made.

o. *It is unclear how a responsible party is expected to use the factors under s. NR 714.07 (1) (a) to (d) to inform its decisions on conducting public participation and notification activities.*

Response: Responsible parties are required to evaluate the criteria. The RPs typically work with the Department when choosing and conducting public participation activities. Typically, the greater the threat or concern, the greater the need for public participation and notification.

p. *The introductory material in s. NR 714.07 (4) (a) does not grammatically correspond with the list that follows.*

Response: Changes were made to the locations and conditions so they correspond with the introductory material.

q. *Is it the department's intent to repeal and recreate s. NR 716.11 (2) under SECTION 176 of the rule? If so, this provision should be modified to reflect that intent.*

Response: The treatment clause was revised to indicate creation of (2g) and (2r).

r. *The new text under s. NR 716.15 (3) and (4) does not follow grammatically with the title of the section (missing subjects). (For grammatically correct examples, see s. NR 716.15 (5) and (6), as renumbered and amended.)*

Response: The rule language has been revised to be consistent with the other sections.

s. *Section NR 718.12 (2) (b) 9. does not follow grammatically with the introductory clause, and should be inserted as a separate paragraph.*

Response: Par. 9 is now 718.12 (2) (c) 1. - 3., and the rest of the newly created section was renumbered.

t. *Section NR 720.02 (8) does not flow grammatically with the title of the section.*

Response: This paragraph was moved to NR 720.02(1) (e).

u. *Under s. NR 722.09 (2m), what is meant by requiring a responsible party to "address the following criteria" and what is meant by "as appropriate"?*

Response: This section was reworded to require the RP to evaluate the criteria, once a remedial action has been selected. The evaluation then would result in a refined remedial action.

v. *Section NR 738.03 (4) (e) does not flow grammatically with the introductory clause, and pars. (a) through (d) should not be included in the same list as par. (e) as they are alternatives.*

Response: This section was reworded to include the language from (e) within the introductory clause, and (a) through (e) are then listed as the alternative.

w. *The use of "DNR" should be replaced by "department" where used in the rule.*

Response: This change was made, specifically throughout NR 746, to be consistent with the other rules.

V. General Comments

1. Comment – As a general matter, we believe the changes proposed in this rule package are consistent with the goal of updating and modernizing Wisconsin's environmental cleanup regulations. Many of the NR 700 series rules have not been changed since they were first adopted in the 1990's. We view many of the proposed revisions to be improvements over the existing code, including policy refinements based upon more than a decade worth of practical experience implementing the cleanup program. We also appreciate the flexible approach to regulation in the NR 720 soil cleanup revisions that give responsible parties multiple options for addressing contaminant pathways and removing public health risks. (Wisconsin Manufacturers and Commerce)

Response – The Department appreciates the feedback regarding the general improvements in rule language and the flexibility provided in NR 720.

2. Comment – As a general matter, we support the Department's efforts to update and clarify the code. We know this is a product of a long technical process involving stakeholders, and many issues were addressed in this process. We commend the Department for taking the time to work through the advisory committee procedure, which shows in the quality of the proposed rule. (Wisconsin Public Service Corporation)

Response – The Department appreciates the acknowledgement that the time spent working with the external advisory committee resulted in improvements to the overall quality of the proposed rule.

3, Comment – Firstly, we commend the WI DNR and others who worked on the proposed changes to the NR 700 rules. This was undoubtedly a significant amount of work, especially during a time when the DNR's staff and resources are stretched and limited.

We think there are several improvements proposed in the rules that will help better protect Wisconsin's citizens and environment. However, we focus our comments on a few key areas in which we think the rules are lacking, need revisions, and/or need clarification.

The Midwest Environmental Justice Organizations (MEJO) core mission is to identify and address disparate effects of toxins and other pollution on the most vulnerable in our society (pregnant women, children, elderly, already ill), minorities, and low-income people. We work to engage these groups in understanding how pollution affects them, to reduce/avoid their exposure and sources of pollution, and to build their capacities to engage collectively in public and political decision making about these issues.

We hope that the Wisconsin DNR can be a national leader in making environmental justice a priority in its environmental policies. To this end, the department should incorporate environmental justice approaches of federal agencies and mandated by Presidential Executive Order 12898, which states that: "To the greatest degree practicable and permitted by law…each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States…" (Clinton, 1994). Further, given that some contaminated facilities (or portions of facilities) in Wisconsin fall under federal laws, it is very appropriate that Wisconsin DNR also make environmental justice part of its core mission and incorporate environmental justice into all its policies.

The main two areas in which we see gaps or problems throughout the NR 700 rules are: (1) lack of attention to requirements for characterizing, managing, remediating contaminated sites that will help identify and address effects of toxic substances on the most vulnerable people, minorities and low-income people; and (2) vague public notification and engagement requirements that lack authority and do not prioritize communication with the most vulnerable, minorities, and low-income people. To some

extent the lack of attention to these issues in the proposed NR 700 changes is likely due to the fact that the external advisory group that helped the DNR develop these changes only included one environmental organization with the majority of the others being industry/legal representatives (and 10 government representatives). (Source: Midwest Environmental Justice Organization)

Response – The Department has worked closely with EPA and local communities on environmental justice issues over the years. For example, the Department was very much involved when in 2005, then Governor Jim Doyle announced his Urban Reinvestment Initiative, which set as a state priority the cleanup of urban neighborhoods in economically and environmentally distressed areas. One of Governor Doyle's first targeted areas was the 30th Street Industrial Corridor in Milwaukee, where neighborhood unemployment was at 19 percent and at least 15 percent of the housing units were vacant. Approximately 34 percent of the population in this area were living in poverty, and 97 percent of residents were considered minority.

The DNR, along with the city of Milwaukee and the 30th Street Industrial Corridor Corporation (ICC), applied for and received $400,000 in EPA Brownfield Assessment Grants. One $200,000 grant addressed hazardous substance contamination, while the other $200,000 grant addressed petroleum contamination. Then in 2007, DNR applied for an additional $400,000 in EPA Brownfield Assessment Grants, with one $200,000 grant again addressing hazardous substances and the other $200,000 grant addressing petroleum contamination. The major goal of this effort was to address contamination associated with the long history of industrial use in this area.

Since that time, significant progress has been made at several major contamination sites in this area and work continues to complete the necessary cleanup work and move the properties toward redevelopment. This is just one example of the efforts the Department has made to address environmental justice related issues.

Regarding the comment that the NR 700 external advisory committee only included 1 environmental organization, we would point out that the NR 700 meeting announcements are sent to everyone on both our Technical Focus Group and Brownfields Study Group e-mail distribution lists which include multiple environmental groups. There has been no attempt on our part to limit the participation of any group or individual that was interested in attending the meetings.

Finally, the Department does not agree that the rules should require prioritized communication with certain individuals. It would be extremely difficult to establish definitions for each of the various groups or individuals. Instead, we believe the current provision that requires all interested members of the public to be included is more appropriate and provides for more efficient implementation.

VI. NR700 – General Requirements

1. Comment – We strongly oppose the change from a 1-in-1,000,000 excess cancer risk to a 1-in-100,000 excess cancer risk. Wisconsin should, in line with other states (e.g. California), require the most protective vapor intrusion health standards possible in order to provide the most protection for vulnerable groups such as children, elderly, pregnant women, and ill.

We strongly recommend that the cumulative excess cancer risk and hazard indices for exposure to chemical mixtures be at least more protective than for individual contaminants, or 1-in-10,000,000 excess cancer risk, in order to account for uncertainties about effects of individual chemicals in the mix, synergistic effects of mixtures, and to provide a protection factor for extremely potent endocrine disruptors and other highly toxic chemicals that might be in the mixture.

Please explain the rationale for the change to a less protective excess cancer risk level. Also, please clarify the following: Do the excess cancer risk and the hazard index levels described here (as proposed changes) refer to individual compounds (one at a time) or mixtures? Are exposures considered additively or synergistically? Most vapor situations involve more than one chemical together (often several that are known or possible carcinogens and/or associated with other significant non-carcinogenic health effects, and unknown compounds). Consequently, the language here and throughout the NR 700 rules should clarify these critical specifics. (Source: Midwest Environmental Justice Organization)

Response – The Department does not believe that a 1-in-1,000,000 excess cancer risk level for vapors in indoor air is necessary for several reasons. EPA issued a document titled "Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990–2005): A Compilation of Statistics for Assessing Vapor Intrusion"[1] in June 2011. The following table compares the range of the 90th percentile concentrations found in background air in homes for 3 common VOCs involved in vapor intrusion, with:

- The current indoor air screening values used by DNR to indicate vapor intrusion may present a health risk, and
- The 1-in-1,000,000 (10^{-6}) and 1-in-10,000,000 (10^{-7}) life-time cancer risk from EPA's Regional Risk Tables

Compound	Range of 90th Percentile concentration (µg/m^3)	WI Indoor Air Vapor Action Level* (µg/m^3)	Life-time cancer risk = 10^{-6}, from EPA's RSL tables (µg/m^3)	Life-time cancer risk = 10^{-7}, from EPA's RSL tables (µg/m^3)
Benzene	5.2 - 15	3.1 (c)	0.31	0.031
Tetrachloroethylene	<RL - 7	42 (n)	9.4	0.94
Trichloroethylene	<RL – 2.1	2.1 (n)	0.43	0.043

[1] http://www.epa.gov/oswer/vaporintrusion/documents/oswer-vapor-intrusion-background-Report-062411.pdf

RL = reporting limit
*Based on either a 10^{-5} life-time cancer risk (c) or an HI=1 (n).

From EPA's Background Indoor Air document:

> "Indoor air typically contains chemicals from consumer products, building materials, and outdoor (ambient) air. Any indoor air sample collected for site-specific assessment of subsurface vapor intrusion is likely to detect chemicals from these other sources, and in many cases, the compounds detected in indoor air may be the same as those present in contaminated soil or groundwater that may enter the building through vapor intrusion."

The range of the 90th percentile concentration was compiled by U.S. EPA from 18 residential indoor air quality studies conducted between 1990 and 2006. The 90th percentile concentration is the concentration due to background substances at 1 in 10 American homes WITHOUT the contribution of vapor intrusion. These are concentrations we can normally expect due to the typical American lifestyle. Wisconsin has chosen to use the lesser of 1-in-100,000 (10^{-5}) life time cancer risk or a hazard index = 1 (for non-carcinogenic properties) as the indoor air screening level for several reasons:

1. These levels are more likely to identify risk due to vapor intrusion rather than background sources in the average home. Even so, some chemicals, such as benzene, can be expected to exceed the 10^{-5} life time cancer risk in the average home with no contribution from vapor intrusion.
2. The very low indoor air concentrations represented by 10^{-7} and 10^{-6} risk levels are below the standard laboratory quantitation levels. Laboratory quantitation levels are usually in the 1.5 to 2 $\mu g/m^3$ range. The very low risk ranges cannot easily be quantified and are "lost" in the background levels found in the average home.
3. U.S. EPA recommends a risk range between 10^{-6} and 10^{-4} life time cancer risk. Most states are selecting 10^{-5} life time cancer risk as a reasonable compromise that takes into consideration background levels of vapor while also being protective of the vapor intrusion pathway.
4. U.S. EPA requires mitigation of the vapor pathway when indoor air concentrations exceed 10^{-4} life time cancer risk or a HI=3. Wisconsin recommends mitigation when indoor air levels exceed the 10^{-5} life time cancer risk levels or a HI=1. In addition, Wisconsin recommends that action be taken when sub-slab vapor concentrations exceed screening levels, even if indoor air levels are below screening levels.

As a final note, most vapor situations are limited to a single compound. If a situation arises where multiple contaminants from a hazardous substance discharge are present, the Department has the authority to require Responsible Parties to assess the additive affects.

2. Comment – The language from guidance documents providing off ramps for non-volatile contaminants should be codified in the rule to clarify when vapor investigation is not required. (Wisconsin Manufacturers and Commerce)

Response – The Department added a definition of "vapors" to NR 700.03(66) to clarify that the compounds of concern must be sufficiently volatile and toxic to pose an inhalation risk to human health via vapor intrusion from a soil or groundwater source.

3. Comment – The notes in NR 700.03(30g), (30m), and (33m) should not include the actual definitions because if NR 149 is updated, these notes will conflict with the definitions in NR 149. (Paul Junio, Regional Account Manager, Northern Lake Service)

Response – The notes referenced above can be modified relatively quickly without going through the entire rule making process. The definitions are typically included so the reader does not need to look up the definition.

VII. NR 706 – Hazardous Substance Discharge Notification and Source Confirmation Requirements

1. Comment – Section NR 716.15(5)(d) requires that geographic position data be provided in Wisconsin Transverse Mercator '91. This is unique to Wisconsin and is not readily available to obtain, especially in the circumstance of reporting releases per the requirements under NR 706.05(1)(d)4 and the subsequent note.

WPL recommends that the final rules adopted allow flexibility to report geographic position data in latitude/longitude. This data is more easily and readily obtained through a GPS device. More specifically, the phrase "or using latitude and longitude" should be added to NR 706.05(1)(d)4. (Alliant Energy)

Response – Once a location is determined in any of a number of ways, including latitude/longitude, a conversion is readily available by using RR Sites Map. Use of WTM coordinates allows the program to consistently locate spill sites on the mapping application with all the other types of sites addressed by the program.

RR Sites Map can be found at http://dnrmaps.wi.gov/imf/imf.jsp?site=brrts2. Coordinates can be converted by entering the latitude and longitude into the "find location" selection. An X on the map indicates the position of the site, and the latitude and longitude, and the WTM coordinates are then shown on the bottom of the screen. You can also determine the WTM coordinates by zooming in on the location to a scale of at least 1:5000, and using the XY button or the "Identify" button.

VIII. NR714 – Public Participation and Notification

1. Comment – We suggest that the DNR incorporate requirements in this chapter in line with Federal Executive Order 12898 on Environmental Justice, which requires that: "Each Federal agency may, whenever practicable and appropriate, translate crucial public documents, notices, and hearings relating to human health or the environment for limited English speaking populations. Each Federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are

concise, understandable, and readily accessible to the public." Adding to this we recommend that outreach and engagement events include people from all racial/ethnic backgrounds near contaminated sites that might be affected by the contamination. (Source: Midwest Environmental Justice Organization)

Response – The existing rules do not prohibit the Department's ability to address any issues with respect to Environmental Justice, including providing outreach to all racial/ethnic backgrounds that may be affected by contaminated property. Over the years the Department has attempted to be as inclusive as possible and has prepared warning signs and fact sheets in both Hmong and Spanish. Given the flexibility in the existing rules, the Department does not feel that additional rule language is necessary in order to implement these efforts.

2. Comment – In this light, the NR 714 chapter on public participation and notifications should require that Responsible Parties and/or the DNR prioritize communications and engagement with the most vulnerable people as well as minorities and low-income people near contaminated sites. This would, in turn, be facilitated by first identifying who and where these groups are in other chapters in the NR 716 requirements (see next comment). Further, minorities and/or non-English speakers or people from non-American cultural backgrounds who might be affected by contamination should be identified and appropriate communications developed for them (if identified near site). (Source: Midwest Environmental Justice Organization)

Response – The existing rules provide equal standing for all individuals. The Department does not agree that changing the rules to require prioritized communication with certain individuals is necessary to ensure all interested members of the public are identified. As discussed in the previous response, the Department has utilized various methods for informing non-English speaking individuals of potential issues associated with contaminated property.

3. Comment – The NR 714 chapter appears to require no meaningful mechanisms for on-going DNR engagement with the public or requirements that the DNR or Responsible Parties respond to citizens' questions and/or comments related to contaminated sites. The entire NR 714 chapter lacks any authority overall and we suspect it is widely ignored (and we have seen many contaminated site situations in which it is). Communication/notification actions outlined appear to be totally optional and/or voluntary and most are, problematically, based on the Responsible Parties discretion. (Source: Midwest Environmental Justice Organization)

Response – NR 714 provides the Department with significant authority to require or conduct whatever public participation is necessary for the particular site including on-going engagement with interested individuals. This allows the Department to tailor the level of public participation based on the needs of the individuals associated with the site in question. The Department strongly disagrees with the assertions that NR 714 is widely ignored and that communication/notification are totally optional, based on our experience

with the thousands of cleanups that have taken place since the rule was originally promulgated in 1994.

4. Comment – Specifics in various sections are vague and lacking clarity about important requirements and criteria for decision making about when/how/what/with whom to communicate. This is very problematic, as communication and engagement with the public, especially those most vulnerable, is extremely important aspect of protecting public and environmental health. We recommend that this chapter have the same level of specificity as other chapters in the NR 700 rule series. (Source: Midwest Environmental Justice Organization)

Response – NR 714 covers the most basic spill situations to the to the most complex contamination cases. As discussed above, the rule provides the Department with the flexibility to deal with each situation on a case-by-case basis. Additional specificity is not necessary to determine how best to communicate with interested parties.

5. Comment – Are any public meetings about contaminated sites required by statute? Shouldn't they be in at least some circumstances? (Source: Midwest Environmental Justice Organization)

Response – No public meetings for cleanup of contaminated properties are currently required. It would be the responsibility of the Legislature to determine if the state statutes should be modified to add this provision. The Department does have the authority under NR 714.07(3) to require the Responsible Party to conduct public informational meetings or the Department can take the responsibility to hold a public meeting when appropriate.

6. Comment – Public notices about remedial actions should also be mailed to people, including all property owners and facilities near the remediation (schools, daycares, churches, retirement homes, etc.), especially in cases in which the remedial action could involve exposure to vulnerable groups to contaminated media from the remediation (e.g. emissions of toxic chemicals in air, piles of contaminated soil). (Source: Midwest Environmental Justice Organization)

Response – The Department provides public notices to interested parties, businesses, commercial properties and others that are near the contaminated property. NR 714.05(5) also specifies that interested parties may request that the Department keep them informed of response actions being taken at the site and maintains a list of persons interested in activities associated with the site.

7. Comment – All documents submitted or transmitted to the department should be made available to the public online. (Source: Midwest Environmental Justice Organization)

Response – The Department currently posts certain documents (in particular case closure information) online. While discussions have taken place on including additional

documents on our web page, we currently do not have the resources to make all documents for all sites available online.

8. Comment – The language in s. NR 714.05(4) should be changed from "may hold a public meeting" to "shall hold a public meeting". The public is often unaware of serious problems (such as harmful toxin levels that are invisible to them), and therefore not demonstrate "sufficient public interest." Project managers have entirely too much discretion in implementing the NR 700 series rules. The public interest is not served when the project managers limit the transparency of the process and departmental action. (Source: Midwest Environmental Justice Organization)

Response –The Department's experience is that requiring a public meeting for every site is not necessary nor a good use of resources. Even the National Contingency Plan, which is the regulations dealing with the Federal Superfund program, does not require a public meeting for every project.

9. Comment – We strongly question designating the Responsible Party as being responsible for evaluating the need for public participation and notification activities and for conducting these activities. Clearly, Responsible Parties are not neutral parties and have reasons to be biased towards minimizing risks and/or not sharing important information about the contamination associated with their activities. As private, rather than public entities, Responsible Parties are not accountable to citizens and political processes and representatives (as government agencies are). DNR is relinquishing its duty to serve and protect citizens to "Responsible Parties", whose only obligations are to its shareholders. (Source: Midwest Environmental Justice Organization)

Response – The Department takes exception with most of this comment. First, Responsible Parties are not solely responsible for evaluating the need for public participation. In fact, the rules specifically allow the Department to implement various types of public participation when necessary. Second, the Department does not believe we have relinquished our duty, and in fact takes the issues of outreach and public participation very seriously.

10. Comment – Based on extensive published risk perception and citizen engagement research, as well as decades of community experience, we know it is unlikely that the public is going to trust the Responsible Parties information and motives, especially when they are the ones responsible for the contamination. Consequently, the public participation will be very constrained and of limited value in meaningfully communicating risks and engaging people in discussions and decision making about the contaminant issue at hand. (Source: Midwest Environmental Justice Organization)

Response – Based on nearly 20 years of experience with NR 714, the Department strongly disagrees that the public participation element will be constrained and of limited value.

11. Comment – While many people also have a considerable amount of distrust for government agencies, government staff are more likely to be trusted to share accurate information about contamination and related risks than the companies or other private entities responsible for causing and/or managing the contamination. Given this, we recommend that section NR 714.07 be re-written to require that the department (when appropriate in collaboration with other government agencies – e. g. health agencies) be responsible for public participation and notification activities (Responsible Parties can also be included in these activities when appropriate). (Source: Midwest Environmental Justice Organization)

Response – In the vast majority of situations, Responsible Parties have been able to adequately implement the necessary public participation activities. When Department involvement is necessary, the rule allows for this to occur and therefore the Department does not feel that any modifications to NR 714.07 are necessary.

12. Comment – The language in NR 714.07 needs to be clarified. Based on what and whose criteria are the Responsible Parties or others held responsible for public participation/notification expected to evaluate whether public participation and notification are necessary, what level notification/participation should occur, when, and who should be notified/engaged? Which of the following criteria are most important in certain circumstances? Who decides? For example, if there are known threats to public health (recognized by DNR and/or public health agencies), but little or no public concern about these threats because people aren't aware of them, does this mean the Responsible Party can decide that public notification and participation activities are not necessary? We have seen cases in which this is what appears to have happened. We have also seen cases in which there is significant public concern about health threats (e.g. 100s of people at meetings, sending complaints) and yet the Responsible Parties and the agencies downplay the threats and therefore no public notification or participation occurs.

Please clarify the language in section 714.07(1) and provide specific criteria and details about what is required by whom, when, and what/whose guidelines for decisions they will follow. (Source: Midwest Environmental Justice Organization)

Response – The Department believes that the language in NR 714.07(1) is clear and is not in need of revision. As stated previously, the scope of the public participation effort is case specific and tailored to the particular situation. The Department is aware of no situations where there has been significant public concern about health threats but the appropriate state agencies have downplayed the situation and ultimately no public participation occurred.

13. Comment – Again, on what and whose criteria are determinations about "known or potential threats to public health, safety, or welfare or the environment" based? This is a very broad statement – it includes public health environmental health, safety. Are assessments of whether there are known or potential threats to these entities based on the Responsible Parties criteria? DNR criteria? EPA criteria? Public health agency criteria? Health experts? Please clarify.

Such generalizations and lack of specific criteria give project managers wide discretion in areas such as public health where they have no expertise. We recommend that assessments of health threats be based on EPA health criteria and standards (which requires someone to make decisions who is aware of and has expertise on these standards). (Source: Midwest Environmental Justice Organization)

Response- The language in NR 714.07(1)(a) has been in the rule since this chapter was originally promulgated in 1994. In general, it requires the Responsible Party to evaluate, in conjunction with the other criteria in this section, how to best to involve the public. Each decision is evaluated on a case specific basis and the Department always retains the ability to require the Responsible Party to take on additional actions or to implement the necessary public participation.

14. Comment – Again, on what and whose criteria are determinations about "level of public concern about a specific site, facility or discharge" made? Please clarify. Again, complete discretion amounts to the ability to do nothing, to not notify the public, and say that the public interest is being served (which is erroneous). (Source: Midwest Environmental Justice Organization)

Response – The language in NR 714.07(1)(b) has been in the rule since this chapter was originally promulgated in 1994. Many of the sites that require cleanup due to a discharge of a hazardous substance are dealt with quickly in order to ensure the contamination is contained to the greatest degree possible. Staff and managers in the Remediation and Redevelopment Program frequently discuss the level of appropriate public involvement in order to ensure the necessary information is disseminated.

15. Comment – What does the provision in NR 714.07(1)(c) mean? (Source: Midwest Environmental Justice Organization)

Response – Responsible Parties are required to evaluate the need for and the level of public participation and notification. Section NR 714.07(1)(c) states that: "The need to contact the public in order to gather information about the response action, including immediate or interim actions." This particular provision requires that the Responsible Party consider how the response action being implemented affects or potentially affects the public and then obtain input and feedback on how they feel the remedy is progressing.

16. Comment – Again, as discussed above, criteria for determining whether or not public notification is necessary at a site or facility, as set forth in NR 714.07 (2), needs to be clarified. All information should include appropriate translation for non-English speaking groups near the contaminated site. (Source: Midwest Environmental Justice Organization)

Response – The Department has been translating signs, fact sheets and other related information into the necessary languages for non-English speaking individuals since

shortly after these rules were promulgated. In addition, the current rule language provides the Department with the authority to direct Responsible Parties to undertake the work that is necessary for the particular situation.

17. Comment – The provisions in NR 714.07(2)(a) should require that notification include information about potential health risks of contaminants, especially to more vulnerable groups (pregnant women, children, etc.), ways vulnerable people can reduce/avoid exposures, specifics about where the contamination is on the site in relation to at-risk and vulnerable groups. (Source: Midwest Environmental Justice Organization)

Response –In situations where exposure to specific contaminants is identified, the Department works with the State Division of Health in order to ensure the people are aware of the potential risks.

18. Comment – The provisions in NR 714.07(2)(b) should be expanded to include how the response actions might affect identified most at risk and vulnerable groups near contamination. (Source: Midwest Environmental Justice Organization)

Response – The Department does not feel that using a public notification to provide the details of how a response action may affect the most at risk and vulnerable individuals would be an effective way to disseminate this information.

19. Comment – Again, based on what and whose criteria are decisions made about if/when public notification is necessary, and which members of the public should be notified? What are the criteria for when the notices should occur? On what and whose criteria are decisions made which members of the public are directly or indirectly affected by the discharge of a hazardous substance and the implementation and operation of any proposal or remedial action? Are any of the notification methods listed in NR 714.07(3)(a) to (j) considered sufficient, or some combination of them, or all of them? Who decides which one(s) is/are most appropriate and when they should happen? Please clarify.

Also, as above, we question and oppose the designation of the Responsible Party as responsible for public notification for the reasons we stated above. We think the department, as a public entity legally and politically accountable to citizens and political representatives, should be completely responsible for these critical risk communication activities. Also, all the language about notification should be changed from "may" to "shall".

Further, most importantly, all kinds of notifications should prioritize communications with those most at-risk and vulnerable, including non-English translation when appropriate (as specified below).

The language in NR 714.07(3) should be modified to require that the department undertake any of the activities specified by paragraphs (a) to (j).

Options (a) to (d), (f), (g), (h) and (j) under NR 714.07(3) should be modified to add the phrase "including non-English translation (when non-English speakers have been identified in the vicinity of the contaminated site) or separate language should be added to specify this for these items. (Source: Midwest Environmental Justice Organization)

Response – NR 714.07(3)(a) to (j) identifies a number of options that can be used to provide notification to the public of a hazardous substance discharge as well as the proposed remedial action. The purpose of the rule in general and this section in particular is to provide flexibility so the most appropriate method(s) are utilized. After 18 years of implementing these provisions, our experience is that Responsible Parties tend to do a good job with the public notification and participation process. Ultimately, the staff and managers in the Remediation and Redevelopment Program are responsible for ensuring the necessary public notification and participation are carried out. However, requiring Responsible Parties to utilize every option in every situation and requiring Department approval of the prepared materials in every situation is not a good use of limited resources.

20. Comment – Add paragraph (k) to NR 714.07(3) requiring contacting neighborhood associations and other groups in the community near the contaminated site to let them know about the circumstances and inviting them to participate in meetings and other events related to the contamination. (Source: Midwest Environmental Justice Organization)

Response – The rule language contained in NR 714.07(3) is broad enough to cover neighborhood associations or other community groups near the contaminated site. Specifically, NR 714.07(3)(j) indicates "Using any other appropriate mechanism to contact and inform the public……" As a result, the Department does not feel that the additional language is necessary.

21. Comment – Add language to NR 714.07(4) specifying that the posting of signs…"include non-English translation (when non-English speakers have been identified in the vicinity of the contaminated site….." (Source: Midwest Environmental Justice Organization)

Response – The proposed change is not necessary as the Department has utilized non-English translation on signs since the rules became effective in 1994.

22. Comment – Add paragraph (e) to NR 714.07(4) that specifies: "Non-English translation should be provided in situations where non-English speaking people live, work, or play in the vicinity of the contaminated site. (Source: Midwest Environmental Justice Organization)

Response – The proposed addition to the rule is not necessary as the Department has utilized non-English translation of numerous documents since the rules became effective in 1994.

IX. NR 716 – Site Investigations

1. *Comment* – If the purpose of this chapter is to characterize a site in order to (in part) understand what human, biological, and environmental receptors are at risk, and therefore what actions are necessary to prevent and/or mitigate risks in order to comply with applicable environmental laws, it should require the identification of the numbers, characteristics, and locations of the people who are most vulnerable or at risk (children, elderly, ill, minorities, poor). This information, in turn, would assist Responsible Parties, the department, and others in notifying, communicating, and engaging with the most vulnerable people in following NR 714 requirements. (Source: Midwest Environmental Justice Organization)

Response – The purpose of NR 716 is to ensure that site investigations provide the information necessary to define the nature, degree and extent of contamination, define the source or sources of contamination, determine whether any interim actions , remedial actions, or both are necessary and allow an interim or remedial action option to be selected that complies with environmental laws. The assessment of environmental risks are addressed when determining soil cleanup standards and as part of the remedy selection process. The Department feels that all potential receptors need to be identified rather than focusing on certain groups of individuals.

2. Comment - Add the following paragraph to NR 716.07: "Locations near within 0.5 mile of site where vulnerable people (pregnant women, children, elderly, ill), minorities and low-income live; locations of buildings where more vulnerable people, minorities, low-income people live, go to school, work, and/or play near site (schools, daycares, community centers, retirement homes, etc.); approximately how many people in these groups are in these locations. (Source: Midwest Environmental Justice Organization)

Response - The Department believes that attempting to define who would be considered a vulnerable individual would be difficult, time consuming and potentially open to criticism. Instead, identifying all interested parties regardless of their proximity to the site is a more appropriate use of resources.

3. Comment – Expand the language in NR 716.07(7) to include "vulnerable people (pregnant women, children, elderly, ill), minorities and low-income". (Source: Midwest Environmental Justice Organization)

Response – The current rule language includes potential or known impacts to all receptors which would include vulnerable individuals.

4. Comment – Add the following provision following paragraph (10) in NR 716.07: "Potential impacts of interim and/or remedial actions on vulnerable people, minorities, low-income people near site. (Source: Midwest Environmental Justice Organization)

Response – The intent of this provision of the rule is to identify potential remedial actions that may be able to address the contamination. It is too early in the cleanup process to define the potential impacts of the remedy on any individuals.

5. Comment – Section NR 716.09(2) should require a description of how locations, numbers, and characteristics of most vulnerable groups will be identified, as well as the potential pathways of exposures to these groups to contaminants at the site (based on information above). (Source: Midwest Environmental Justice Organization)

Response – This section of the rule is focused on the methods for defining soil, groundwater and other environmental conditions at this site. The previous section requires that potential or known impacts to all receptors (which would include vulnerable individuals) be identified.

6. Comment – Add paragraph (e) to NR 716.11(3) requiring that enough information be provided to identify most at-risk and vulnerable groups to contaminants released from the site. (Source: Midwest Environmental Justice Organization)

Response – The purpose of this section of the rule is to provide details on the factors that need to be considered when conducting a field investigation to determine the degree and extent of contamination.

7. Comment – Expand the provisions in NR 716.11(5)(b) to include the most at-risk and vulnerable people, minorities, low-income people near the site. (Source: Midwest Environmental Justice Organization)

Response – The current rule language requires an identification of the impacts of the contamination on all receptors, which would include vulnerable individuals.

8. Comment – We strongly agree with the additions to NR 716.11 related to vapor intrusion. Would suggest adding, as above, prioritizing sub-slab and indoor vapor monitoring in buildings where the most vulnerable people, minorities, and low-income people live, work, and play. (Source: Midwest Environmental Justice Organization)

Response – The rule requires an evaluation of the presence and concentration of vapors sub-slab and in indoor air when the impact on an occupied structure needs to be determined, regardless of whether the occupants would be considered vulnerable. If vapor intrusion is identified, WDNR would work with the Division of Health to determine the potential risks to the individuals present.

9. Comment – The methods of investigation section in NR 716.15(2)(e) should include description of methods for identifying where vulnerable people, minorities, and low-income people are living, working, playing, and/or going to school and how they might be exposed to contamination from site. (Source: Midwest Environmental Justice Organization)

Response – The purpose of this section of the rule is to provide direction to Responsible Parties for describing the investigative techniques that were used to complete the site investigation. Identifying how potential receptors might be exposed to contamination is addressed elsewhere in the rule.

10. Comment – NR 716.15(3) regarding results should be expanded to include a map of locations where vulnerable people, minorities, and low-income people are living, working, playing, and/or going to school and may be (or have been) affected by currently or past contamination, releases, accidents, etc. (Source: Midwest Environmental Justice Organization)

Response – The current rule requires that the extent of contamination in all environmental media be defined, all properties within the contaminated site boundary be identified and the impacts of the contamination on all potential receptors be identified. As discussed earlier, the Department believes that attempting to define who would be considered a vulnerable individual would be difficult, time consuming and potentially open to criticism.

11. Comment – The rule changes of greatest interest and concern to WMC members relate to regulation of vapor intrusion at remediation sites. Although the proposal makes clear that vapor intrusion issues must be investigated and addressed, it does not provide detail with respect to conducting vapor intrusion site investigations. We believe that provisions from departmental guidance documents should be added to the final rule in order to clarify the nature and scope of what responsible parties should do to investigate vapor intrusion. For example, it would be helpful to clarify that intrusive sub-slab sampling at nearby buildings will not be required if screening analysis from soil probes suggests vapor intrusion is not a problem in the area of those buildings. (Wisconsin Manufacturers and Commerce)

Response – The Department agrees that further clarification in these areas consistent with existing guidance is appropriate. Therefore, the rule language contained in NR 716.11(5)(g) and (h) has been expanded to include the factors that need to be considered when determining whether the field investigation needs to determine the presence of vapors sub-slab or in indoor air.

12. Comment – One area where we are submitting comments relates to vapor intrusion. As the Legislature's mandate in Act 10 is to use rules and statutes, as opposed to guidance, we request the Department incorporate more detail in the code relating the scope of a vapor investigation and remediation (as opposed to relying on the current vapor intrusion guidance document). The specific areas where we would like to see more detail are listed below. (Wisconsin Public Service Corporation)

a. <u>Screening for Petroleum-related Compounds.</u> Section IV.A. of the vapor intrusion guidance lists criteria applicable to screening out the vapor intrusion pathway concern that should be incorporated into appropriate sections on NR 700 (e.g. NR 716, NR 720) – for example, the distance benchmarks of 30 feet

from building foundations where free-phase product is present, the requirement of 5 feet of clean unsaturated soil, and/or the trigger of 100 ug/L benzene concentration in groundwater. The specifics of these screening criteria are well referenced and are supported in the technical literature as cited in the guidance. Adding the criteria categories (if not the actual values, which may understandably change as knowledge is gained) will provide specificity to the process for determining whether a vapor intrusion concern potentially exists at a site.

b. Allowance for a Phased Assessment Approach. Section V.A. of the vapor intrusion guidance recognizes the appropriateness of a step-wise approach to investigating the vapor pathway where buildings or structures are present, beginning with basic groundwater and soil matrix characterizations. Allowing for this phased approach within the context of NR 700 is appropriate. The step-wise approach is particularly applicable to sites that involve lower volatility compounds, highly biodegradable compounds, and/or a physical setting that would make external sampling a better choice (e.g. soil gas sampling under pavement, in an area of similar concern exterior to a building). Incorporating language for a step-wise approach, in lieu of intrusive sampling techniques (e.g. sub slab and indoor air sampling) allows obtaining the necessary data for assessment purposes, less delay in some cases, while furthering the investigation/remedial decision process.

c. The Process and Level of Detail Contained in the Code for Determining Risk Posed by the Vapor Intrusion Pathway Should be Commensurate With That Defined for Soil Cleanup Requirements. Section VI of the guidance outlines the process for use of screening and action levels. The revisions to NR 700 reference the required hazard index, cancer risk levels and other default parameters but falls short of outlining other important criteria highlighted in the guidance, such as applicable attenuation factors and related distinctions between residential/small commercial buildings and large commercial/industrial buildings and the process for applying screening/action levels and related decision criteria. These distinctions provided for in the guidance should be incorporated in the code.

Response – The Department agrees that further clarification of a number of these suggestions is appropriate. Therefore, the rule language contained in NR 716.11(5)(g) and (h) has been expanded to include the factors that need to be considered when determining whether the field investigation needs to determine the presence of vapors sub-slab or in indoor air. However, as mentioned in the comments, the Department does not intend to include any of the specific numerical values as they are very likely to change in the future.

13. Comment – NR 716.15(4)(d) should be reworded to require cross sections for those sites with 3 or more soil borings. It is impractical to create a valid cross section with only two borings. For sites with less than three borings the boring logs can be provided to illustrate the geology at the site. (Bert Cole, Senior Program Manager, AECOM)

Response – The Department agrees that there could be situations where a cross section is not necessary when only 2 soil borings are available. However, rather than remove this provision for all sites, there is currently rule language in NR 715.15(1) that gives the Department authority to waive this requirement on a case-by-case basis.

14. Comment – The note in NR 716.13(10) may unintentionally limit the methods allowed by consultants. NR 716.13(12) seems to cover methods. (Paul Junio, Regional Account Manager, Northern Lake Service)

Response – While the note lists a number of suitable analytical methods, the rule language gives the Department significant flexibility to approve alternative analytical procedures. The methods listed in the note can be modified relatively quickly if EPA changes the acceptable procedures without going through the formal rulemaking process.

X. NR 720 – Soil Cleanup Standards

1. Comment – Citizens for Safe Water Around Badger (CSWAB) supports many of the additions and clarifications in the proposed revisions to NR 720, particularly new language requiring the assessment of human health risks posed by vapor intrusion of volatile soil contaminants into homes and buildings. However, there are several specific areas within the proposed rule which we believe may not be sufficiently protective of children and expectant mothers for certain routes of exposure such as dermal absorption. Additionally, the definition of risks associated with mixtures is limited to additive risks and does not require consideration of synergistic effects or carcinogenic potentiation associated with mixtures such as technical grade DNT (dinitrotoluene). Given the significant potential for uncertainty, contaminant mixtures warrant an extra level of protection rather than a compromise in excess cancer risk. This is especially critical in the calculation of risks associated with prenatal exposure to pesticides and endocrine disruptors. For this reason, we strongly recommend that cumulative excess cancer risk of exposure to mixtures be at least or more protective than for individual contaminants or 1 x 10^{-7}. (Citizens for Safe Water Around Badger)

Response – If the cumulative risk is set at 1 x 10^{-7}, then whenever more than 1 carcinogenic contaminant is present the standard for each individual compound would need to be less than 1 x 10^{-7} (i.e. 1-in-10,000,000) excess cancer risk. This would be more stringent than the lowest (or the most strict) level of EPA's risk range. The Department has utilized a 1 x 10^{-5} cumulative excess risk since the rule was originally promulgated in 1995 and relies on EPA methodology for determining the appropriate standards. We believe the current approach has worked well and provides the necessary protection.

2. Comment – The phrase “and soil productivity” should be added to the stated purpose of this chapter to encourage the successful and sustainable future of land including for agriculture. (Citizens for Safe Water Around Badger)

Response – “Soil Productivity” is not a parameter that would be addressed by the provisions contained in NR 720. Instead, it could be addressed by existing rule language in the remedy selection portion of NR 722 which requires Responsible Parties to restore the environment to the extent practicable.

3. Comment –We recommend adding section (e) or a “note” to NR 720.02 clarifying that the release of hazardous substances such as pesticides, lead, PCBs, and other environmental toxins to soils and matrixes containing these contaminants (such as dried applied lead-based or PCB-contaminated paint associated with building and/or infrastructure demolition) constitutes an environmental release subject to regulation under this chapter. At the Badger Army Ammunition Plant, the responsible party has argued that such circumstances to not constitute an environmental release. (Citizens for Safe Water Around Badger)

Response – Chapter 292 of the Wisconsin Statutes requires that a person who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance is responsible for taking the necessary action to restore the environment to the extent practicable. The terms “hazardous substance” and “discharge” are broadly defined in the statute and therefore the Department does not believe further clarification in NR 720.02 is necessary.

4. Comment – For purposes of clarity, “degradation by-products” should be better defined in NR 720.03(3)(g) or listed as a separate entry in this section. The definition should be inclusive of all pathways including contaminants transformed by biological activity (biotransformation), physical means, chemical means, etc. Biotransformation of the explosive dinitrotoluene (DNT) – a common contaminant of concern at Badger Army Ammunition Plant – produces reduction products, metabolites, and degradation products, for example. (Citizens for Safe Water Around Badger)

Response – The term “degradation by-products” covers all of the situations described in the comment and therefore no additional rule language is necessary.

5. Comment – We recommend striking the second sentence in NR 720.03(3m) altogether as irreparable.

As written, the language could result in the underestimation of risk especially to children. When there is no direct information for a specific chemical, the appropriate conservative presumption that is utilized by EPA, and should be applied here, is that contaminants should be presumed to be 10 times more toxic in order to be protective of children. This approach has been most notably applied in the assessment of risk associated with exposure to pesticides. In the case of endocrine-disrupting contaminants, the risk factor associated with chronic low level exposures may rise by 100 fold.

Moreover, risks associated with dermal absorption for virtually all chemical groups are consistently HIGHER than ingestion. If toxicity factors are unavailable, the rule should err on the part of the conservative and the presumption should be that there is MORE rather than LESS absorption. This is particularly true in the case of dioxins where there is nearly100% absorption for certain forms of dioxin across the gut. (Citizens for Safe Water Around Badger)

Response – The sentence recommended for deletion is from a previous version of the proposed rule. The current language was taken from EPA's Dermal Risk Assessment Guidance and is accurate where oral-to-dermal route extrapolation is concerned.

The algorithm developed by EPA for determining soil cleanup standards and included in WDNR's soil cleanup standard guidance (RR-890) is that the hazards or risks from different pathways (ingestion, dermal contact and inhalation) are combined in determining the direct-contact standard. This results in the overall standard being less than would be calculated using the individual pathways. In addition, the EPA methodology also accounts for potentially higher risks to children for those compounds EPA classifies as mutagenic. As a result, we do not anticipate risk underestimation, even to children, for those chemicals with toxicity values that are in the data base hierarchy (e.g. IRIS, PPRTV, ATSDR, California EPA, HEAST, etc.) that the EPA algorithm utilizes. For those situations where toxicity information is not in one of the data bases for any specific pathway (e.g. dermal) then a site specific approach can be utilized.

6. Comment – The definition of 'inhalation of vapors" contained in NR 720.03(8m) should be expanded to include <u>indoor</u> air; this recommendation is consistent with new EPA guidance, specifically soil vapor intrusion. (Citizens for Safe Water Around Badger)

Response – The definition for inhalation of vapors does not include indoor air because the volatilization factor that is used does not account for the presence of structures, which would be necessary for indoor air to be a factor. Regarding vapor intrusion, there are numerous locations throughout the rule that address that pathway directly.

7. Comment – We recommend adding a definition for the term "remedy" as follows: (15) "Remedy" is an action which results in restoration of the environment and soil productivity to the extent practicable, minimizes harmful effects to the air, lands and waters of the state and is protective of public health, safety and welfare, and the environment.

This addition is based on our experience with Badger Army Ammunition Plant. The responsible party has asked that the installation of a municipal water system be treated by state regulators as a "remedy" for groundwater contamination in and near the facility. (Citizens for Safe Water Around Badger)

Response – The term remedy is used in 2 different notes in NR 720. The term has been used interchangeably with "remedial action" which is defined in NR 700.03(48). In order to maintain consistency, the definition of "remedial action" has been modified to include "remedy".

8. Comment – We strongly recommend the addition of Drinking Water Health Advisory Levels (HALs) to the rule language contained in NR 720.05(3)(b) as consistent with WDNR Manual Code 4822.1 and other guidance documents which allow the agency to utilize HALs as remedial goals. This addition is especially important at military sites where contaminants may be unique to Department of Defense industry and not commonly detected in the State's water resources. This clarification affords the department with the authority to require remediation of soil contaminants that pose a risk to nearby residential drinking water wells and public health, and therefore is in the best interest of the state. (Citizens for Safe Water Around Badger)

Response – The Drinking Water Health Advisory Levels are not included in NR 140. Most HALs are based on EPA's non-enforceable lifetime health advisories. In determining HALs, the Departments Drinking and Groundwater Program uses a non-carcinogen EPA health advisory "as is", but for carcinogens uses a value that is 100 times less than the EPA HAL.

The Department may utilize various sources of information including HALs or EPA's risk-based tap water concentrations when evaluating what an appropriate soil cleanup standard should be. However, requiring compliance with non-enforceable standards is not appropriate and therefore the additional language was not added.

9. Comment – The note following NR 720.05(3) is viewed as irreparable so we strongly recommend deleting the entire note, for the following reasons:

As in a previous section, the language could result in the underestimation of risk especially to children. When there is no direct information for a specific chemical, the appropriate conservative presumption that is utilized by EPA, and should be applied here, is that contaminants should be presumed to be 10 times more toxic in order to be protective of children. This approach has been most notably applied in the calculation of risk associated with exposure to pesticides and endocrine disrupters. In the case of endocrine-disrupting contaminants, the risk factor associated with chronic low level exposures, especially during pregnancy, may rise by 100 fold.

Moreover, the draft language specifies that risks cannot be anything other than additive. The draft stipulates that multiple exposures "shall" be additive however risks associated with mixtures may be synergistic or result in carcinogenic potentiation. These factors would be expected to result in a higher calculated and actual risk to human health (compared to additive risks). In other words, a numerical risk of 1 plus 1 may actually equal 4 or 8, rather than 2.

Additionally, the proposed language in the last sentence also allows for combined-exposure levels to be decreased but not increased. (Citizens for Safe Water Around Badger)

Response – The comment refers to language from an earlier draft which was subsequently modified before being sent out for public comment. The existing language is now found in the note following NR 720.07(1)(b)1. That language indicates that for single contaminants, the cleanup standard will be determined based on the combined risk from exposure to soil considering ingestion, inhalation, and dermal contact. For situations with multiple contaminants, the note references the cumulative excess cancer risk and the hazard index for non-carcinogens.

10. Comment – In order to be consistent with other sections in NR 720, reference to biological receptors in NR 720.07(1)(c)2 is recommended, specifically risks to terrestrial ecosystems and wildlife. (Citizens for Safe Water Around Badger)

Response – Based on a review of the rule, the Department believes that biological receptors including terrestrial ecosystems and wildlife are already addressed by the definition of "sensitive environment" and under section NR 720.13 which covers other pathways of concern.

11. Comment – Should the word "explosive" in NR 720.07(1)(c)4 be "exposure"? (Citizens for Safe Water Around Badger)

Response – The term lower explosive limit is correct. This requirement is for chemicals that may not have human toxicity values, but have the ability to ignite and explode and chemicals that may reach their lower explosive limit before being toxic. A good example is methane.

12. Comment – The term "land use classification" needs additional clarification. At Badger Army Ammunition Plant, responsible parties have argued that very large parcels of land should be remediated to "industrial" standards when, in fact, the majority of actual land use activity is and will be as wildlife habitat. As a result, soil remediation goals may not be protective of biological receptors including grassland birds and the human food chain through consumption of wildlife that may live and graze on these lands. (Citizens for Safe Water Around Badger)

Response – There is currently language in NR 720.19(6) that requires other pathways of concern to be considered including the human food chain, surface water quality and terrestrial ecosystem, when those pathways of exposure are of concern at a site or facility. This language has been retained in the proposed rule revisions and is found in NR 720.13.

13. Comment – We recommend adding the following sentence to the second note in NR 720.07(2)(b): "Soil averaging should not be used to avoid remediation of "hot spots" which are readily accessible or simply remediated". Again, this is based on our

experience at Badger where small distinct areas of surface soil contamination, i.e. "hot spots", could have been easily remediated when clean-up equipment was mobilized nearby but the responsible party balked at the minor extra effort. (Citizens for Safe Water Around Badger)

Response – It was not clear based on the example provided whether the Responsible Party attempted to use soil averaging to address the distinct areas of soil contamination. Regardless, expanding the note further would be considered substantive and would need to be included in the rule. In addition, a definition of the term "hot spot" would be needed as it may not be clear to readers what that term is referring to. The Department believes that the existing language already addresses the issue raised by this comment and therefore is not proposing to make any further changes.

14. Comment – NR 720.09 (or another appropriate section) should be amended to include language which encourages a soil remedy which will achieve compliance with groundwater standards, public welfare standards, and health advisory levels (HAL's) **within a reasonable period of time.** In talking with experienced regulators at WDNR, some closed sites may not achieve compliance with the enforcement standards (ES's) for more than 100 years!

We suggest adding a note which says: "Whenever possible, soil remedial actions should be designed to achieve compliance with groundwater standards, public welfare standards, and drinking water health advisory levels in a reasonable time frame, preferably less than 5 years. (Citizens for Safe Water Around Badger)

Response – There are several issues associated with this comment. First, by identifying the standards for compliance and including a specific time frame for meeting the standards, the note would be considered substantive and as such, would need to be included in the rule. Second, defining "reasonable period of time" was attempted several times in the past, but a specific numerical value could never be agreed upon due to the large number of variables that affect how to select the number. As a result, the Department concluded that establishing a specific number was not appropriate.

15. Comment – We recommend adding Drinking Water Health Advisory Levels to the end of the second note in NR 720.09(1). (Citizens for Safe Water Around Badger)

Response – The suggested modification was made to the note.

16. Comment – We recommend adding "or anticipated" land use to NR 720.05(5). In the case of land parcels at Badger Army Ammunition Plant that are being prepared for transfer to the WDNR and others, the current land use is as an industrial facility however the anticipated land use includes conservation, grazing, hunting, agriculture, and recreation. The proposed language could prohibit the Department from requiring a level of cleanup that is protective of anticipated future uses.

The recommended addition is especially important for federal lands which are **exempted** from local planning and zoning. (Citizens for Safe Water Around Badger)

Response – Adding "anticipated" to the rule language is not necessary to address the concerns that were raised as the rule also provides for using more stringent non-industrial cleanup standards are necessary to protect public health on or off the site or facility. In addition, NR 720.13 requires Responsible Parties to consider human food chain, surface water quality and terrestrial eco-systems regardless of the land use classification of the site.

17. Comment – In order to be consistent with other sections, a reference to biological receptors (terrestrial ecosystems) is important. We recommend adding the phrase "and biological receptors" to NR 720.05(5)(b)2. (Citizens for Safe Water Around Badger)

Response – The Department has made the requested change.

18. Comment – Given the significant potential for uncertainty and the considerable potential for synergistic and carcinogenic potentiation, contaminant mixtures warrant an EXTRA level of protection, not a compromise in excess cancer risk. For this reason, we recommend that cumulative excess cancer risk for exposure to mixtures be at least or more protective that for individual compounds, or $1x10^{-7}$.

As the vast majority of contaminated sites throughout the State have multiple contaminants, the draft language for mixtures is a significant short-coming in the proposed rule. As proposed, it appears that a site with a large number of chemicals could pose a greater risk to human health than a simple site with only one contaminant. As cited earlier in our comments, this approach does not allow for known synergistic and other non-additive risks associated with exposures to mixtures.

As noted in the proposed rule, there is limited toxicological information on the potential human health risks and implications associated with mixtures however, in cases where there is no direct information for a specific mixture, the appropriate conservative presumption that is utilized by EPA, and should be applied here, is that mixtures should be presumed to be 10 times **more** toxic in order to be protective of children and infants. In the case of endocrine-disrupting contaminants, the risk factor may rise by 100 fold for chronic low level exposures, especially during pregnancy. This precautionary approach has been most notably applied by EPA in the assessment of risks associated with exposure to pesticides[2]. State environmental regulations are required to be as protective as federal rules and policies.

Children are at a greater risk for some pesticides for a number of reasons. Children's internal organs are still developing and maturing and their enzymatic, metabolic, and immune systems may provide less natural protection of than those of an adult. There are

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[2] U.S. Environmental Protection Agency, Guidance for Conducting Health Risk Assessments of Chemical Mixtures, External Scientific Peer Review Draft, NCEA-C-0148, April, 1999.

"critical periods" in human development when exposure to a toxin can permanently alter the way an individual's biological system operates.[3]

This recommended additional protection is further warranted as certain Wisconsin communities and neighborhoods are already at greater health risk due to factors beyond regulatory control such as poverty. (Citizens for Safe Water Around Badger)

Response – The Department is not aware of any situations where EPA has imposed higher risk factors when soil is impacted by more the one contaminant. Instead, EPA uses a risk range of $1x10^{-4}$ to $1x10^{-6}$ when determining appropriate cleanup standards. The Department uses a $1x10^{-6}$ excess cancer risk for individual compounds and a not to exceed risk of $1x10^{-5}$ when more than one contaminant is present. This is clearly within the risk range established by EPA. In addition, while the Department is generally required to follow federal rules, compliance with federal guidance is typically at the discretion of the state.

The process established in NR 720.11 for determining soil cleanup standards based on direct contact utilizes default exposure assumptions based on EPA's regional screening level guidance. The Department has developed guidance based on that document that is referenced in NR 720. The EPA guidance already accounts for potentially higher risks to children for those compounds that are defined as mutagenic.

19. Comment – As stated in previous sections, consideration of only additive risks is limiting and therefore may not be more protective of human health, especially children and expectant mothers. If any assumption is made, it should be MORE, not less protective. (Citizens for Safe Water Around Badger)

Response – As discussed above, the calculator developed by EPA accounts for potentially higher risk to children for those compounds considered mutagenic. If EPA further refines the process for addressing cumulative risk, the Department will evaluate the revised approach and work with external parties to determine how best to implement subsequent changes.

20. Comment – Recommend adding "and uptake" to the note in NR 720.13 as certain contaminants may bioconcentrate or biomagnify but may not meet all criteria as bioaccumulative. (Citizens for Safe Water Around Badger)

Response – The proposed change was made.

21. Comment – Large sections of the proposed rule appear to be derived from the U.S. EPA exposure factors handbook of which there are 2 – one is specific for children. If this is the case, specific reference should be made to these handbooks in the rule to allow for updates and consistency with future EPA policy. The final rule should stipulate where and how and why these particular documents were chosen. Both specifics and references

[3] U.S. Environmental Protection Agency, Fact Sheet: Children are at Greater Risks from Pesticides Exposure, January, 2002.

to national guidance documents are recommended for clarity and consistency. (Citizens for Safe Water Around Badger)

Response – The reference to the handbook is implicit because the Departments guidance document (RR-890), which is referenced in NR 720, cites the EPA website. The calculations available from this EPA website use default values that are from the U.S. EPA exposure factors handbook.

22. Comment – The proposed rule should be amended to include references to Groundwater Preventive Action Limits (PALs) found in other rules such as NR 140 for consistency and to encourage early proactive responses to environmental releases BEFORE an exceedance of a groundwater Enforcement Standard (ES) occurs. Restoration of groundwater is very often an exceedingly expensive and technically difficult task to accomplish and as a result, the State's groundwater resources are at increasing risk for long-term impairment. The "caution light" approach afforded by the PAL allows regulators to work with responsible parties to reduce costs and future liabilities by encouraging early deliberate actions to prevent groundwater exceedances and subsequent enforcement action. The PALs are an important tool that serves both the responsible party and the State so reference in the text is recommended. (Citizens for Safe Water Around Badger)

Response – The change that has been included in the proposed rule is to utilize the Enforcement Standards (and not the PALs) when calculating site specific soil cleanup standards that are protective of groundwater. This does not change the need to comply with NR 140. In fact, most sites utilize groundwater specific information to determine if soil contamination is at levels that pose a concern.

23. Comment – We strongly support the comments submitted by Citizens for Safe Water Around Badger on this section of the rules. (Source: Midwest Environmental Justice Organization)

Response – See the Department's responses to the comments provided by Citizens for Safe Water Around Badger, above.

24. Comment – Section NR 720.11(1)(a) identifies procedures for determining soil direct contact residual contaminant levels (RCL's) and states that the RCL for individual compounds should be determined using an excess cancer risk of $1x10^{-6}$ and a hazard quotient for non-carcinogens of one. These are reasonable target cancer risk and non-cancer hazard goals when deriving RCLs.

All site evaluations and decisions should be made using a consistent metric which is the cumulative risk associated with a site. Currently, this principle is incorporated in the rule at several locations where a cumulative excess cancer risk goal of $1x10^{-5}$ is identified. However, it is unclear in the current draft rule that RCLs can be adjusted upward when the cumulative cancer risk for the site is below the cumulative cancer risk goal of $1x10^{-5}$. This lack of clarity results in regulatory inconsistency when sites are treated differently

based solely on the number of chemicals present. In other words, it is unreasonable to have one site cleaned up to a risk of $1x10^{-6}$ because one chemical is present while another site is cleaned up to a risk of $1x10^{-5}$ because ten chemicals are present.

I recommend adding the following sentence to section NR 720.11(1)(b): "Individual compound RCLs can be adjusted upward when the resulting cumulative cancer risk is less than $1x10^{-5}$ and the non-cancer hazard quotient is less than one. (Brad Grimsted, Pioneer Technologies Corporation)

Response – The goal of this provision of the rule, which has been in effect since 1995, was to minimize the risks posed by sites with soil contamination. The majority of sites dealt with by the Department have more than one compound of concern, so the single compound risk level was set at $1x10^{-6}$ with the knowledge that the total site risk would be higher.

25. Comment – The soil parameter values in section NR 720.11(4) are different for air filled soil porosity, water filled porosity, and organic carbon content for soil and groundwater. For example, air filled soil porosity for direct contact is 0.28 and air filled soil porosity for soil to groundwater modeling is 0.13. Either the parameter values should be the same or text should be added to clarify why the parameter values are different. (Brad Grimsted, Pioneer Technologies Corporation)

Response – The Department added a note to this section to clarify that the values used in this section are the default values set out in WDNR publication RR-890, "Soil Residual Contaminant Level Determination Using the U.S. EPA Regional Screening Level Web Calculator".

XI. NR 725 – Notification Requirements for Residual Contamination and Continuing Obligations

1. Comment – The NR 725, Appendix A Notification letter template is needlessly complex and legalistic. The letter should be reduced to the following items:

a. A description of the release and the remedy,
b. A description of the remaining soil and groundwater contamination on the current owner's property,
c. A description of the owners continuing obligations,
d. A description of prohibited activities,
e. A summary of what will happen next, and
f. The attachments.

Most of what they need to know is contained in the attachments. The letter is confusing and much too long. What most people care about is that the condition of their property and what they can and cannot do in the future. (Bert Cole, Senior Program Manager, AECOM)

Response – We have tried to simplify the language, while providing the basic information on the residual contamination and potential continuing obligations, as well as a discussion of what is legally their liability or responsibility after a cleanup has been conducted, and what options they may have. We have also changed the template to a form, for ease of use. We retained language regarding all the situations we have come across to date. However, not all these options are likely at a given site. The actual notification letter will be relatively short for most situations. By providing a standardized format, we feel a more consistent and complete message will be provided to those who are left with residual contamination and some type of continuing obligation on their property.