POLLUTION CONTROL BOARD
June 16, 2016

IN THE MATTER OF:	)	
RCRA SUBTITLE C UPDATE, USEPA	)	R16-7
AMENDMENTS (January 1, 2015 through	)	(Identical-in-Substance
June 30, 2015 and July 2, 2015)	)	Rulemaking - Land)

Adopted Rule. Final Order.

OPINION OF THE BOARD (by J.A. Burke):

SUMMARY OF TODAY'S ACTION

The Board adopts amendments updating Illinois hazardous waste regulations to include three amendments adopted by the United States Environmental Protection Agency (USEPA) during the first half of 2015. The Board includes two further sets of amendments that USEPA adopted during the second half of 2015. The Board includes needed corrections, including suggestions from USEPA and the Illinois General Assembly's Joint Committee on Administrative Rules (JCAR). Specifically, the Board adopts identical-in-substance amendments to 35 Ill. Adm. Code 703, 720 through 722, 724 through 728, and 733.

This is an identical-in-substance rulemaking to incorporate revisions to the federal hazardous waste regulations into the Illinois hazardous waste regulations. Sections 7.2 and 22.4(a) of the Act (415 ILCS 5/7.2 and 22.4(a) (2014)) require the Board to adopt regulations that are identical in substance to hazardous waste regulations adopted by the USEPA. Section 22.4(a) also provides that Title VII of the Act and Section 5 of the Administrative Procedure Act (5 ILCS 100/5-35 and 5-40 (2014)) do not apply to the Board's adoption of identical-in-substance regulations.

The revised USEPA rules implement Subtitle C of the federal Resource Conservation and Recovery Act of 1976 (RCRA Subtitle C) (42 U.S.C. §§ 6921 *et seq*. (2013)). The federal RCRA Subtitle C hazardous waste management (HWM) regulations are found at 40 C.F.R. 260 through 268, 270 through 273, and 279. USEPA adopted the underlying federal hazardous waste amendments between January 1, 2015 and June 30, 2015 and on July 2, 2015.

The Board will cause the adopted amendments to be published in the *Illinois Register*. The Board intends to file the adopted amendments after waiting 30-days for USEPA review. To allow for USEPA review and publication, the Board extends its deadline to complete these rules. *See* 415 ILCS 5/7.2(b) (2014). The Board estimates that these steps will be completed by August 12, 2016. *Id.* The previous due date was June 30, 2016.

This opinion supports an order adopted this day.

FEDERAL ACTIONS CONSIDERED IN THIS RULEMAKING

The following listing briefly summarizes the federal actions considered in this RCRA Subtitle C update rulemaking:

January 1, 2015 through June 30, 2015 Amendments

USEPA amended the federal hazardous waste regulations three times between January 1, 2015 and June 30, 2015. The USEPA actions requiring amendments to Illinois regulations are the following:

January 13, 2015 (80 Fed. Reg. 1694): Amendment of DSWR

USEPA action: USEPA significantly amended the Definition of Solid Waste Rule (DSWR). Specifically, USEPA revised the conditions under which a material that is the subject of reclamation is considered "hazardous secondary material" (HSM), and is excluded from the definition of "solid waste." If a material is not solid waste, it cannot be hazardous waste. Thus, the excluded HSM are not subject to regulation as hazardous waste.

Board action: The Board must update the Illinois hazardous waste regulations to incorporate the new federal requirements. The USEPA revisions made the DSWR more stringent than the pre-existing rule.

April 8, 2015 (80 Fed. Reg. 18777): Removal of the Comparable Fuels and Gasification Rules

USEPA action: USEPA responded to the vacatur of the comparable fuels rule in Natural Resources Defense Council v. EPA, 755 F.3d 1010 (D.C. Cir. 2014), and the gasification rule in Sierra Club v. EPA, 755 F.3d 968 (D.C. Cir. 2014). USEPA removed the rules from the federal regulations.

Board action: The Board must amend the Illinois hazardous waste regulations to remove the comparable fuels rule and the gasification rule. The comparable fuels rule was an exclusion from the definition of solid waste. The gasification rule was an exclusion from regulation as hazardous waste. The removal of each rule made the federal regulations more stringent.

April 17, 2015 (80 Fed. Reg. 21302): Adoption of the CCR Rule, Exclusions for Fossil Fuel Combustion Residuals from Regulation as Hazardous Waste

USEPA action: USEPA determined not to regulate coal combustion residuals (CCR) as hazardous waste and adopted new rules to govern the disposal of CCR as non-hazardous solid waste. While the new CCR rules do not affect hazardous waste regulation, a small segment expands the "Bevill exemption" from the definition of "hazardous waste." The expanded exemption includes eight specified "uniquely associated wastes" that are generated from processes associated with combustion of coal and other fossil fuels and which are disposed with CCR.

Board action: The Board must revise the Illinois Bevill exemption of CCR from the definition of hazardous waste to include the eight specified uniquely associated wastes. The inclusion of the uniquely associated wastes broadens the Bevill exemption.

July 2, 2015 Amendments

The Board engages in ongoing monitoring of federal actions. The Board identified two USEPA actions after June 30, 2015 affecting RCRA Subtitle C hazardous waste rules and addressed these actions in this rulemaking. Those actions are the following:

July 2, 2015 (80 Fed. Reg. 37988): Corrections to the CCR Rule

USEPA action: USEPA corrected the effective date of the CCR Rule from October 14, 2015 to October 19, 2015.

Board action: The Board notes the revised effective date, but no action is necessary in that regard. The effective date is now past, and the date does not appear in the text of the revisions to the Bevill exemption.

July 2, 2015 (80 Fed. Reg. 37992): Revision of the List of OECD Countries

USEPA action: USEPA revised the list of Organization for Economic Cooperation and Development (OECD) countries for trans-boundary shipments of hazardous waste. USEPA added Estonia, Israel, and Slovenia to reflect that these countries are now implementing OECD Decision C(2001)107.

Board action: The Board must revise the Illinois rules to include these nations as OECD countries.

Other Federal Actions Having a Direct Impact on the Illinois RCRA Subtitle C Regulations

In addition to the amendments to the federal RCRA Subtitle C regulations, amendments to certain other federal regulations and statutory revisions impact Illinois hazardous waste rules. Most notably, 35 Ill. Adm. Code 720.111(b) and (c) include several incorporations of federal regulations and statutes by reference. The incorporated regulations in subsection (b) include segments of various USEPA environmental regulations, Nuclear Regulatory Commission (NRC) rules, and United States Department of Transportation (USDOT) hazardous materials transportation regulations in the *Code of Federal Regulations* that USEPA has incorporated into the federal hazardous waste rules. The statutory provisions incorporated by reference in subsection (c) are provisions of the *United States Code* upon which USEPA has relied in a way that has prompted the Board to incorporate by reference.

The Board routinely uses the opportunity of an identical-in-substance update to update citations to federal rules, as well as incorporations by reference. In this proceeding, the Board updates all references to Titles 10, 33, 40 and 49 of the *Code of Federal Regulations* to the 2015 edition, which is the latest available on the Government Printing Office website. All references to the *United States Code* are updated to the 2013 edition, which is the latest version available on that website.

Other Amendments to the Illinois RCRA Subtitle C Regulations

In addition to the amendments to the federal RCRA Subtitle C regulations and amendments to certain other federal regulations and statutes, the Board often finds that corrections to the Illinois hazardous waste rules are necessary. In the present proceeding, the Board included corrections derived from three sources:

- JCAR observed that the Board had failed to complete two requested corrections in a prior proceeding. The Board includes the two corrections in this proceeding.

- USEPA submitted corrections based on USEPA's periodic review of the stringency of the Illinois hazardous waste rules and their consistency with the federal rules. The Board adopts revisions based on USEPA's suggestions.

- The Board adopts additional corrections based on our own review of the Illinois hazardous waste regulations.

Identical-in-Substance Rulemaking Addendum to the Final Opinion and Order of the Board: Tables of Deviations from the Federal Text and Corrections to and Clarifications of the Base Text

The Board has assembled and entered into the record of this proceeding a document entitled, "IIS Rulemaking Addendum to the Final Opinion and Order of the Board" (IIS-RA (F)). The IIS-RA (F) comprises several tables that document the deviations from the federal amendments included in this rulemaking, the corrections and amendments that are not based on current federal amendments, the differences between the proposed and adopted versions of the text, and suggestions for revisions to the text that the Board declined. These tables appeared at the end of Board opinions and orders in identical-in-substance proceedings in the past. The Board now includes these tables in the record as a separate document.

The following discussions refer to tables in the IIS-RA (F) in appropriate segments. The IIS-RA (F) is available for download and examination on the Board's website (www.ipcb.state.il.us) at the webpage for this R16-7 proceeding, at the following address:

Some of the entries in the IIS-RA (F) tables are discussed further in appropriate segments of the general discussion beginning in this opinion, but this opinion includes no further information other than what appears in the tables for the vast majority of the entries. The contents of the tables are described at the end of this opinion.

PUBLIC COMMENTS

The Board adopted a proposal for public comment in this matter on March 3, 2016. Notices of Proposed Amendments appeared in the March 18, 2016 issue of the *Illinois Register*.[1] The Board held the record open for the required 45 days, until May 2, 2016, to receive public comments on the proposed amendments. The Board accepted additional public comments filed in this matter, the last of which was filed on May 20, 2016

During the public comment period, the Board received public comments on the proposed amendments. The Board also filed correspondence with USEPA and JCAR as public comments in the Board's docket. *See* 5 ILCS 430/5-50(b-5) & (c) (2014). Using this approach, the docket contains 20 public comments.

Where the Board revised the text of the proposed amendments in response to a public comment, the Board summarizes the location, source, and nature of the revision in Table 5 of this opinion. Where the Board declined to follow a comment, the Board summarizes the suggested revision in Table 6, together an explanation why the Board declined to make the revision. No further consideration is given to the preponderance of the revisions accepted or declined in this opinion.

USEPA Comments. Board staff unsuccessfully tried to determine from USEPA a source for identifying constituent-specific adjustment factors used to determine air emissions from tanks and containers. *See* PC 1 and PC 2. The Board discusses these adjustment factors in the discussion of the exclusion for second-party solvent remanufacturing below in this opinion.

The corrections suggested by USEPA in PC 3 form the basis of several corrections to the existing text of the rules. General consideration of the need to make the corrections appears in discussion of USEPA-prompted corrections below in this opinion. All of the corrections made by the Board appear in Table 5 of this opinion. Table 6 indicates suggested corrections that the Board has opted not to make in this proceeding.

By PC 7, USEPA submitted suggested corrections to the proposed amendments. By PC 9, USEPA issued notice of its proposed approval of elements of the Illinois hazardous waste regulations and invited comments. The program elements reviewed included USEPA-suggested corrections in this proceeding. By PC 17, USEPA suggested corrections to the proposed amendments based on the USEPA amendments during the second half of 2015.

IEPA, IERG, and Dow Comments. The Board received substantive comments on the proposed amendments from the Agency (PC 14), IERG (PC 15), and Dow (PC 16). The exclusive focus of the IERG and Dow comments is the DSWR amendments. The primary focus of the Agency comments is the DSWR, but the Agency also suggests non-substantive corrections and comments on other aspects of the amendments. The Agency comments on repeal of the financial assurance forms from the Standardized Permit Rule and the addition of Chemical Abstract Service (CAS) numbers to the list of chemicals in Appendix C to 35 Ill. Adm. Code

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[1] At 40 Ill. Reg. 3836 (Part 703), 3850 (Part 720), 3930 (Part 721), 4280 (Part 722), 4289 (Part 724), 4392 (Part 725), 4515 (Part 726), 4570 (Part 727), 4611 (Part 728), and 4827 (Part 733).

728. Consideration of the substantive aspects of the three sets of comments occurs in the appropriate segments of the discussion below.

In the opinion accompanying the March 3, 2016 proposal for public comment, the Board requested comments on 22 specific questions. The Board received responses from the Agency (PC 14) and appreciates that the Agency provided detailed responses. The Agency further suggests non-substantive corrections to the text of the amendments. Agency suggestions and the Board action or inaction on each is briefly described in Tables 4 and 5 below in this opinion.

JCAR Comments. Numerous times during this proceeding, JCAR staff suggested changes to the rules. The Board docketed the JCAR communications as PC 5, PC 6, PC 10, PC 12, PC 13, PC 18, PC 19, and PC 20.

JCAR further submitted to the Board a copy of the text of each Part involved in this proceeding that indicated the revisions JCAR staff made to the text in preparing the text for publication in the *Illinois Register*. The Board has called that copy of the text the "delta text."

JCAR suggestions, and the Board's responses, are described in Tables 4 and 5. Further discussion of JCAR queries in PC 10 and PC 12 appear in discussion of the DSWR amendments. The Board discusses JCAR suggestions in PC 5, PC 18, PC 19, and PC 20 below.

Notification of Used Oil Activity (PC 5). JCAR said that there was confusion in a proposed amendment to the Board note appended to the waste activity notification requirement applicable to a large quantity used oil handler in 35 Ill. Adm. Code 733.132. The proposed amendment would have added the following statement to the note:

> The generator or consolidation point must send a copy of the notification to the Agency and USEPA Region 5, whether USEPA Form 8700-12 is used some other means for the required notification.

Board staff explained to JCAR that this statement conforms the notification requirement to the waste activity notification requirements in other segments of the hazardous waste rules. All other provisions for notification of waste activity require use of USEPA Form 8700-12. *See* 35 Ill. Adm. Code 722.112(b) (generator), 723.111(b) (transporter), 724.111 (treatment, storage, or disposal), 725.111 (interim status facility), 739.142(b) (used oil transporter), 739.151(b) (used oil processor), 739.162(b) (used oil burners), and 739.173(b) (used oil marketers) (corresponding with 40 C.F.R. 262.12(b), 263.11(b), 264.11, 265.11, 279.42(b), 279.51(b), 279.62(b), and 279.73(b), respectively). The notification provision applicable to large quantity handlers of universal waste does not require use of USEPA Form 8700-12. *See* 40 C.F.R. 279.32 (corresponding with 35 Ill. Adm. Code 733.132). The added statement clarified that the notification is to go to the Illinois Environmental Protection Agency (Agency) and USEPA whether USEPA Form 8700-12 or some other means is used for notification.

The Board revises the language to read as follows:

> The generator or consolidation point must notify the Agency and USEPA Region 5, either by submitting USEPA Form 8700-12 or by some other means.

This is the language included in today's final opinion and order.

Land Disposal Treatment Standards for Hazardous Waste Number U202 (PC 19). JCAR observed that there was no treatment standard in the land disposal restrictions for "U202" waste in 40 C.F.R. 268.40. Board staff explained to JCAR that USEPA assigned saccharin hazardous waste number U202 in 1980. *See* 45 Fed. Reg. 33084, 33126 (May 19, 1980) (adopting the U202 listing in 40 C.F.R. 721.133(f)); *see also* 60 Fed. Reg. 242, 300 (Jan. 3, 1995) (adding the land disposal treatment standard for U202 waste). Board staff further explained that USEPA removed the U202 waste listing and associated land disposal restriction treatment standard in 2010. *See* 75 Fed. Reg. 78918, 78926 (Dec. 17, 2010). Board staff explained that such removals and failures to adopt a proposed hazardous waste listing have created several gaps in the sequence of hazardous waste numbers.

Format of Topical Subheadings in the Text (PC 18 and PC 20). JCAR requested that the Board capitalize and remove the ending periods from the various topical subheadings throughout the rules. JCAR specifically cited topical subheadings in 35 Ill. Adm. Code 721, 724, and 725. The Board found many more topical subheadings in those three Parts and also in 35 Ill. Adm. Code 722, 726, and 728. The Board has incorporated these suggestions to the extent possible within the limited timeframe available to adopt these rules. All of the JCAR suggestions that the Board accepted are listed in Table 5 in this opinion. The JCAR suggestions declined as listed in Table 6 in this opinion. Two types of JCAR suggestions warrant specific discussion.

Structure of 35 Ill. Adm. Code 721.934(e). JCAR altered the structure of 35 Ill. Adm. Code 721.934(e) in a way that changes the meaning intended by USEPA. The Board has declined the JCAR suggestion and restored the federal structure to the provision, changing only the ending commas of subsections (e)(1) and (e)(2) to JCAR-suggested semicolons.

USEPA added 40 C.F.R. 261.1034(e) to read as follows:

> (e) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous secondary materials with time-weighted, annual average total organic concentrations less than 10 ppmw shall be made as follows:
>
> (1) By the effective date that the facility becomes subject to the provisions of this subpart or by the date when the material is first managed in a hazardous secondary material management unit, whichever is later, and
>
> (2) For continuously generated material, annually, or
>
> (3) Whenever there is a change in the material being managed or a change in the process that generates or treats the material.

JCAR changed the structure of this provision in corresponding 35 Ill. Adm. Code 721.934(e) as follows:

e) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous secondary materials with time-weighted, annual average total organic concentrations less than 10 ppmw must be made as follows:

1) By the effective date that the facility becomes subject to the provisions of this Subpart AA or by the date when the material is first managed in a hazardous secondary material management unit, whichever is later; and

2) For continuously generated material:

A) annually; or

B) Whenever there is a change in the material being managed or a change in the process that generates or treats the material.

The JCAR-revised structure makes alternatives of the annual determination and the determination upon occurrence of a change in the material or the process that generates the material. This is contrary to the plain language of 40 C.F.R. 261.1084(e).

In actuality, after the initial determination required by paragraph (e)(1), USEPA intended that the determination occur annually for continuously generated material and upon occurrence of a change in the material or the process that generates the materials. The logical structure is A and (B or C). There is no ambiguity in the federal language that would lead to an interpretation that the logical structure is (A and B) or C.

Format of Topical Subheadings. JCAR has asked the Board to use title case for all topical subheadings. JCAR has further asked the Board remove ending periods where the topical subheading is not the opening words of a paragraph of text. The Board has capitalized many topical subheadings in the text of the present amendments. This includes about 20 topical subheadings for which JCAR specifically made a suggestion. This also includes over 100 topical subheadings for which JCAR did not specifically suggest the change. The Board has declined to remove ending periods.

The Board has not similarly revised the several topical subheadings in the more than 20 existing codified exclusions from definition as solid waste.[2] Most of the topical subheadings for the exclusions are too long for the capitalization needed for change to title case. The Board had to shorten the majority of the topical subheadings for which JCAR suggested capitalization.[3] Similarly shortening the topical subheadings for the exclusions was not possible at this time without risk of possible unintended substantive change to one or more of the exclusions.

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[2] *See* 35 Ill. Adm. Code 721.104(a)(2)-(a)(15), (a)(16)-(a)(21) & (a)(24)

[3] *See* 35 Ill. Adm. Code 725.984(a), (a)(3), (a)(4), (b)(3), (b)(4), (b)(5), (b)(6), (b)(7), (b)(8), (b)(9), (c) & (c)(3).

DUE DATE AND EXTENSION OF DEADLINE

By an order dated December 22, 2015, the Board extended the deadline for completion of the present amendments from January 13, 2016 until June 30, 2016. The Board stated two reasons for the delay: (1) the volume and complexity of the underlying USEPA amendments; and (2) USEPA's submission of comments based on its periodic review for federal authorization of the Illinois RCRA Subtitle C regulations.

The Board now finds that completing the amendments before June 30, 2016 is not possible. The Board finds that additional time is needed to complete the amendments.

In addition to the reasons recited in the order dated December 22, 2015, the Board adds three additional reasons for delay. First, the number of suggested JCAR corrections to the text is extreme. The Board counts more than 300 JCAR suggestions in the nearly 800 pages of text. The Agency and USEPA collectively offered another nearly 50 suggestions. Second, the substantive comments required considerable review and deliberation. Finally, the substantive comments received by the Board prompted the Board to seek comment from USEPA, and the Board allows USEPA additional time for USEPA review to evaluate the substantive comments.

The Board today adopts amendments based on the March 3, 2016 proposal for public comment. The Board will submit these amendments to USEPA. After allowing USEPA 30 days to review the amendments, the Board will file the adopted amendments with the Office of the Secretary of State. The Board therefore extends its deadline to complete these rules to allow for a 30-day USEPA review period and publication in the *Illinois Register*. *See* 415 ILCS 5/7.2(b) (2014). The Board estimates that these steps will be completed by August 12, 2016.

DISCUSSION

The following discussion begins with discussion of the federally derived amendments involved in this docket. A discussion of Board-initiated corrections and clarifying amendments follows discussion of the federal amendments. This series is organized by federal subject matter, appearing in chronological order of the relevant *Federal Register* notices involved. The discussion concludes with a description of the types of deviations that the Board makes from the literal text of federal regulations in adopting identical-in-substance rules.

Amendments to the Definition of Solid Waste—Sections 720.110, 720.130, 720.131, 720.133, 720.134, 720.142, 721.101, 721.102, 721.104 & Subparts I, J, M, AA, BB & CC of Part 721[4]

[4] Subpart I: Sections 721.270, 721.271, 721.272, 721.273, 721.274, 721.275, 721.276, 721.277, 721.278 & 721.279; Subpart J: Sections 721.290, 721.291, 721.293, 721.294, 721.296, 721.297, 721.298, 721.299 & 721.300; Subpart M: Sections 721.500, 721.510, 721.511 & 721.520; Subpart AA: Sections 721.930, 721.931, 721.932, 721.933, 721.934 & 721.935; Subpart BB: Sections 721.950, 721.951, 721.952, 721.953, 721.954, 721.955, 721.956, 721.957, 721.958,

The following discussion is intended to aid understanding of the federal action that the Board now incorporates into the Illinois rules. Persons wishing to explore the substance of the USEPA corrections and clarifications should refer to the appropriate *Federal Register* notices. The Board's purpose here is to ensure that the Illinois regulations are identical-in-substance to their federal counterparts.

On January 13, 2015 (80 Fed. Reg. 1694), USEPA amended the DSWR as it applies to reclamation from HSM. These amendments significantly revised the DSWR as USEPA extensively amended the requirements on October 30, 2008 (at 73 Fed. Reg. 64668) relating to reclamation from HSM. The 2008 and 2015 amendments both exclude certain reclamation activities from hazardous waste regulation by deeming that the material is HSM and excluding it from the definition of solid waste.

The 2008 amendments to the DSWR excluded HSM that was reclaimed "under control of the generator"[5] in non-land-based units from the definition of solid waste with minimal conditions.[6] 40 C.F.R. 261.2(a)(2)(ii) (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B)). In a second exclusion, the 2008 amendments imposed the additional condition of notification of waste activity for HSM reclaimed under the control of the generator in land-based units. 40 C.F.R. 261.4(a)(23) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)). A third exclusion adopted in 2008 excluded HSM sent offsite for reclamation by a person not under the control of the generator. This off-site exclusion imposed several more conditions on management of the HSM.[7] 40 C.F.R. 261.4(a)(24) (2015) (corresponding with 35

721.959, 721.960, 721.961, 721.962, 721.963 & 721.964; Subpart CC: Sections 721.980, 721.981, 721.982, 721.983, 721.984, 721.986, 721.987, 721.988 & 721.989.

[5] Defined as either both generated and reclaimed at the generating facility or reclaimed at a different facility and both the generating facility and the reclamation facility share owned common ownership. 40 C.F.R. 260.10 (2015) (definition of "hazardous secondary material generated and reclaimed under the control of the generator"; corresponding with 35 Ill. Adm. Code 720.110 (same definition))/

[6] Primarily, after excluding specified wastes, that the HSM is not speculatively accumulated, the HSM is managed only in non-land-based units, the HSM remain contained, and the reclamation is legitimate. 40 C.F.R. 261.2(a)(2)(ii) (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B)). This exclusion was codified directly within the definition of solid waste itself. USEPA codified all of the other reclamation-related exclusions adopted in 2008 in the exclusions provision. *See* 40 C.F.R. 261.4(a)(23), (a)(24) & (a)(25) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23), (a)(24) & (a)(25)).

[7] In addition to the conditions applicable to HSM reclaimed under the control of the generator, there were additional conditions: who could manage the HSM; the packaging required for transport; how long the HSM could be stored in transit; that the HSM must be contained; recordkeeping requirements; conditions on management of residuals generated during reclamation; equipment, personnel, and financial responsibility requirements for the reclaimer; and that the generator assert reasonable efforts to ensure that any intermediate facilities and the reclaimer have engaged in proper management and reclamation of the HSM and have complied

Ill. Adm. Code 721.104(a)(24)). A fourth exclusion applied to HSM exported from the United States for reclamation. 40 C.F.R. 261.4(a)(25) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(25)).[8]

The recent 2015 amendments significantly circumscribe the scope of reclamation activities that are excluded from the definition of solid waste and, hence, from regulation as hazardous waste. First, significant conditions drawn from the hazardous water treatment, storage, and disposal (T/S/D) facility standards now apply to HSM that is subject of reclamation activities. Second, USEPA now requires a greater degree of control by the HSM generator over off-site reclamation activity. Third, application of the exclusion now relies more heavily on case-by-case administrative determinations. Finally, under a "remanufacturing exclusion," the DSWR now narrowly excludes reclamation at a facility that is not under the control of the generator. The remanufacturing exclusion is only allowed for specified reclamation activities, of specified spent solvents, that are generated by specified industries, and which are destined for specified subsequent uses.

A brief overview of the federal hazardous waste regulations is necessary to understand the current DSWR amendments. The federal hazardous waste rules make a series of distinctions to determine whether and which hazardous waste requirements apply to any material. The regulatory scheme has many twists and turns, but it is capable of framing at a fairly basic level for the present discussion. The primary focus of what follows is on materials that are subject to reclamation, which is one mode of recycling.

Solid Waste Determination.

The threshold regulatory determination is whether a material is "solid waste." The DSWR is used to make that determination. Any "discarded material" that is not excluded by rule[9] or administrative order[10] is deemed solid waste. The first segment of the determination is whether the material is discarded material.[11] The second segment is whether a regulatory exclusion applies to the secondary material.

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with the applicable conditions to the exclusion. 40 C.F.R. 261.4(a)(24) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)).

[8] Because USEPA totally eliminated the exclusion of HSM exported for reclamation, the Board refers the interested reader to 40 C.F.R. 261.4(a)(25) (2015) for the conditions that applied.

[9] A listing of materials that are excluded from the definition of solid waste is codified as 40 C.F.R. 261.4(a) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)).

[10] The hazardous waste regulations provide for case-by-case administrative determinations that recycled materials are not solid waste. *See* 40 C.F.R. 260.30 & 260.34 (2015) (corresponding with 35 Ill. Adm. Code 720.130 & 720.134).

[11] An administrative determination that a secondary material is not solid waste is a determination the material is not discarded material when managed within whatever conditions were imposed with the administrative determination. *See* 40 C.F.R. 260.34(a), (b), (b) & (c) & 260.43(a),

Discarded Material. Among the materials considered discarded material are abandoned materials and some recycled materials. 40 C.F.R. 261.2(a)(2) (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)). A material is abandoned when disposed of; burned or incinerated; or accumulated, stored, or treated (but not recycled) before or in lieu of being disposed of or burned or incinerated. 40 C.F.R. 261.2(b) (2015) (corresponding with 35 Ill. Adm. Code 721.102(b)).

Recycling. The federal rules define "recycling" as use, reuse, or reclamation. 40 C.F.R. 261.1(c)(7) (2015) (corresponding with 35 Ill. Adm. Code 721.101(c)(7)). "Reclamation" is essentially defined as regeneration or processing to recover a usable product.[12] *See* 40 C.F.R. 261.1(c)(4) (2015) (corresponding with 35 Ill. Adm. Code 721.101(c)(4)). "Use or reuse" occur when a material is used to make a product, and no components of the material are recovered as separate end products, or the material is used in place of a commercial product. 40 C.F.R. 261.1(c)(5) (2015) (corresponding with 35 Ill. Adm. Code 721.101(c)(5)). Based on these definitions, reclamation occurs where processing of a secondary material is necessary before it is used or where some elements of the secondary material are removed to produce a material that is capable of use or reuse. A secondary material that is subject of reclamation is deemed discarded material unless it falls within an exclusion from solid waste[13] or one of four narrow exceptions.[14]

The hazardous waste rules include other activities as "recycling": use constituting disposal, burning for energy recovery, and speculative accumulation. 40 C.F.R. 261.2(c) (2015) (corresponding with 35 Ill. Adm. Code 721.102(c)). Secondary materials burned for energy recovery or used in a manner that constitutes disposal are always deemed discarded materials. 40 C.F.R. 261.2(a)(2)(i), (c) & Table 1 (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(A) & (c) & 721.Table Z). A secondary material that is subject of speculative accumulation is deemed discarded material unless it falls within one narrow exception.[15]

(a)(3) & (c)(1); *see also* 40 C.F.R. 260.131(c) & (d)(1) (requiring legitimate recycling, which requires that the material is not discarded material). Thus, the existence of an applicable administrative determination begins and almost always ends the solid waste analysis. The only residual issues relate to compliance with any conditions imposed on the determination.

[12] The provision actually defines when a material is "reclaimed." 40 C.F.R. 261.1(c)(4) (2015) (corresponding with 35 Ill. Adm. Code 721.101(c)(4)).

[13] These are the exclusions of 40 C.F.R. 261.4(a) (corresponding with 35 Ill. Adm. Code 721.104(a)), three of which are affected by the recent DSWR amendments.

[14] (1) The secondary material is sludge; (2) the secondary material is a byproduct that exhibits a characteristic of hazardous waste; or (3) the secondary material is a commercial chemical product that exhibits a characteristic of hazardous waste. 40 C.F.R. 261.2(c)(3) & Table 1 (2015) (corresponding with 35 Ill. Adm. Code 721.102(c)(3) & 721.Table Z). *See infra* note 15 for the fourth narrow exception.

[15] It is "P"- or "U"-listed waste—*i.e.*, the material is a commercial chemical product listed in 40 C.F.R. 261.33 (corresponding with 35 Ill. Adm. Code 261.133. 40 C.F.R. 261.2(c)(4) & Table 1 (2015) (corresponding with 35 Ill. Adm. Code 721.102(c)(4) & 721.Table Z).

Speculative Accumulation. Speculative accumulation is also an element of both the 2008 and 2015 DSWR amendments. A material that is the subject of speculative accumulation usually does not qualify for any of the reclamation-based exclusions from the definition of solid waste.[16] "Speculative accumulation"[17] is defined as accumulation of a material before recycling, unless (1) there is a feasible means for recycling the material; and (2) at least 75 percent of the material is recycled or transferred for recycling within the calendar year after its accumulation. 40 C.F.R. 261.1(c)(8) (2015) (corresponding with 35 Ill. Adm. Code 721.101(c)(8)).

Sham Recycling. "Sham recycling" is a similar disqualifier for any recycling-based exclusion from the definition of solid waste, including the reclamation-based exclusions. The recent 2015 amendments to the DSWR added a definition of "sham recycling" and deemed a material that is subject of sham recycling discarded material. Sham recycling is any recycling that is not "legitimate recycling" as defined elsewhere in the rules. 40 C.F.R. 261.102(g) (2015) (corresponding with 35 Ill. Adm. Code 261.2(g)). The 2015 amendments to the DSWR extensively revised the definition of "legitimate recycling" at 40 C.F.R. 260.43 (corresponding with 35 Ill. Adm. Code 720.143) incorporated into the rules with the 2008 DSWR amendments. Thus, more detailed discussion of legitimate recycling appears below.

Regulatory Exclusion

After determining a secondary material is discarded material, the focus shifts to whether one of the several regulatory exclusions applies to the material. The regulations include several express exclusions from the definition of solid waste. These exclusions are codified in 40 C.F.R. 261.4(a) (corresponding with 35 Ill. Adm. Code 721.104(a)).[18] Conditions apply to most of the

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[16] *See* 40 C.F.R. 260.30(a), 40 C.F.R 261.4(a)(23), (a)(24) & (a)(27) (2015) (HSM reclaimed under control of the generator in non-land-based units, HSM transferred off-site for reclamation and a verified reclamation facility, and HSM transferred to another person for remanufacturing, respectively) (corresponding with 35 Ill. Adm. Code 721.104(a)(23), (a)(24) & (a)(27)); *see also* 40 C.F.R 261.4(a)(6), (a)(7), (a)(12), (a)(17), (a)(18), (a)(19), (a)(20) & (a)(22) (2015) (pre-existing exclusions for pulping liquors, spent sulfuric acid, oil-bearing secondary materials, spent materials from primary mineral processing, petrochemical recovered oil from organic chemical manufacturing, spent caustic solutions from petroleum refining liquid treating, HSM used to make zinc fertilizers, and used CRTs, respectively) (corresponding with 35 Ill. Adm. Code 721.104(a)(6), (a)(7), (a)(12), (a)(17), (a)(18), (a)(19), (a)(20) & (a)(22)); *but see* 40 C.F.R. 260.31(a) & 261.1(c)(8) (allowing exclusion if recycling or transfer for recycling will occur within the following year) (corresponding with 35 Ill. Adm. Code 720.131(a) & 721.101(c)(8)).

[17] The actual defined term is "accumulatively speculated." *See* 40 C.F.R. 261.1(c)(8) (2015) (corresponding with 35 Ill. Adm. Code 721.101(c)(8)).

[18] The federal rules include blanket exclusions from regulation of specified materials: (1) industrial ethyl alcohol that is reclaimed; (2) scrap metal not excluded by another exclusion; (3) fuels produced from refining oil-bearing hazardous waste; and (4) specified hazardous waste fuel produced and oil reclaimed from refining oil-bearing hazardous waste. *See* 40 C.F.R.

exclusions. Very significant conditions apply to some of the reclamation-based exclusions adopted in 2008 and 2015.

Table A, appended at the end of the discussion, summarizes several of the codified exclusions from the definition of solid waste. The Board has summarized all of the exclusions that USEPA added in the 2008 amendments and removed or modified in the 2015 amendments to the DSWR. Each entry outlines the express conditions that apply to that particular exclusion.

All of the exclusions affected by the 2008 and 2015 revisions to the DSWR are based on reclamation of HSM. The 2008 revisions excluded a broader range of reclamation activities that the 2015 revisions have now circumscribed. The 2015 revisions have imposed significant conditions drawn from hazardous waste T/S/D facility standards on off-site reclamation activities, and they have further subjected most off-site reclamation to the need for an administrative determination before exclusion is available.

The following segments of discussion outline the effect of the 2015 DSWR amendments on the reclamation-based exclusions. This discussion is brief, and the Board directs attention to the *Federal Register* notice of January 13, 2015 for the details of the USEPA amendments and the reasoning behind them.

Exclusion for Reclamation Under the Control of the Generator. The 2008 DSWR amendments established two separate exclusions from the definition of solid waste for HSM reclaimed under the control of the generator. One directly excluded HSM reclaimed under the control of the generator in non-land-based units from the definition of solid waste itself. *See* 40 C.F.R. 261.2(a)(2)(ii) (2015), as removed at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B)). The other excluded HSM reclaimed under the control of the generator in land-based units. 40 C.F.R. 261.4(a)(23) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)). Although codified separately with conditions worded differently, the conditions imposed on these two exclusions were parallel and very similar.[19] *Compare* 40 C.F.R. 261.2(a)(2)(ii) (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B)) *with* 40 C.F.R. 261.4(a)(23) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)).

The 2015 DSWR amendments combined and revised these exclusions in a single provision. The exclusion of HSM reclaimed under control of the generator is very similar to the prior generator-reclamation exclusions. Several conditions survived the combination and changes: (1) reclamation must occur within the U.S.[20]; (2) the HSM must be contained[21]; (3) the

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261.7(a)(3) (2015) (corresponding with 35 Ill. Adm. Code 721.107(a)(3)). Those exclusions from regulation are not from the definition of solid waste.

[19] The significant difference being that notice of waste activity was not required for the exclusion that applied to HSM reclaimed in non-land-based units.

[20] 40 C.F.R. 261.2(a)(2)(ii)(D) (2015) & 40 C.F.R. 261.4(a)(23) (2015), and as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.2(a)(2)(B)(iv) & 721.104(a)(23)).

HSM must not be subject of another exclusion, and it must not be a lead-acid battery[22]; (4) the reclamation must be legitimate recycling[23]; (5) speculative accumulation is not allowed[24]; (6) persons managing the HSM must provide notice of waste activity[25]; and (7) the reclamation must be performed under the control of the generator.[26]

However, there are a few differences between the conditions attached to the 2015 exclusion and those attached to the pair of 2008 exclusions. Initially, the combination of the two former exclusions obviated the need to distinguish between land-based units and non-land-based units.[27] Second, USEPA moved the substance of the former definition of "hazardous secondary material generated and reclaimed under the control of the generator" into the exclusion to stand

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[21] 40 C.F.R. 261.2(a)(2)(ii)(C) (2015) & 40 C.F.R. 261.4(a)(23)(i) (2015) & 40 C.F.R. 261.4(a)(23)(ii)(A), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.2(a)(2)(B)(iii) & 721.104(a)(23)(A), before amendment, & 35 Ill. Adm. Code 721.104(a)(23)(B)(i), after amendment).

[22] 40 C.F.R. 261.2(a)(2)(ii)(E) & (a)(2)(ii)(F) (2015) & 40 C.F.R. 261.4(a)(23)(iv) (2015) & 40 C.F.R. 261.4(a)(23)(ii)(D), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.2(a)(2)(B)(iv) & 721.104(a)(23)(D), before amendment, & 35 Ill. Adm. Code 721.104(a)(23)(B)(iv), after amendment).

[23] 40 C.F.R. 261.2(a)(2)(ii)(H) (2015) & 40 C.F.R. 261.4(a)(23) (2015), and as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.2(a)(2)(B)(viii) & 721.104(a)(23)).

[24] 40 C.F.R. 261.2(a)(2)(ii)(B) (2015) & 40 C.F.R. 261.4(a)(23)(iii) (2015) & 40 C.F.R. 261.4(a)(23)(ii)(B), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.2(a)(2)(B)(ii) & 721.104(a)(23)(C), before amendment, & 35 Ill. Adm. Code 721.104(a)(23)(B)(ii), after amendment).

[25] 40 C.F.R. 261.4(a)(23)(vi) (2015) & 40 C.F.R. 261.4(a)(23)(ii)(C), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)(F), before amendment, & 35 Ill. Adm. Code 721.104(a)(23)(B)(iii), after amendment).

[26] 40 C.F.R. 261.2(a)(2)(ii)(A) (2015) & 40 C.F.R. 261.4(a)(23)(ii) (2015) & 40 C.F.R. 261.4(a)(23) & (a)(23)(i), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.2(a)(2)(B)(i) & 721.104(a)(23)(B), before amendment, & 35 Ill. Adm. Code 721.104(a)(23) & (a)(23)(A), after amendment).

[27] *Compare* 40 C.F.R. 261.2(a)(2)(ii)(C) & 261.4(a)(23) (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B)(iii) & 721.104(a)(23), before amendment) *with* 40 C.F.R. 261.4(a)(23), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23), after amendment).

as a condition.[28] Third, the generator and any tolling reclaimer must retain records and document the legitimacy of the recycling.[29] Fourth, K171 and K172 wastes[30] are no longer excepted from the exclusion.[31] Finally, a person managing the HSM must comply with new emergency preparedness and response requirements,[32] which USEPA has borrowed from the contingency plan and emergency preparedness requirements of the T/S/D facility standards.[33]

The Board has incorporated the revised exclusion for HSM reclaimed under the control of the generator into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal exclusion. All deviations from the federal text are listed in Table 3 below in this opinion. This discussion includes consideration of only two of the deviations.

The Board intends that two changes to the federal text will add clarity to the language of the exclusion. USEPA refers to "hazardous secondary material" and "material." The Board has changed "material" to "hazardous secondary material." *Compare* 40 C.F.R. 261.4(a)(23)(ii)(D) *with* 35 Ill. Adm. Code 721.104(a)(23)(B)(iv). Further, USEPA refers to HSM that is leaked or released as "discarded." The Board has changed this to "discarded material" to echo the term used in the definition of solid waste and in other segments of the rules. *Compare* 40 C.F.R. 261.4(a)(23)(ii)(A) *with* 35 Ill. Adm. Code 721.104(a)(23)(B)(i); *see* 40 C.F.R. 260.43(a) & (c)(1) & 261.2(a), (a)(1), (a)(2) & (a)(2)(i) (2015) (corresponding with 35 Ill. Adm. Code 720.143(a) & (c)(1) & 721.102(a), (a)(1), (a)(2) & (a)(2)(A)). The Board made the same changes in similar passages of the exclusion for HSM reclaimed at a verified reclamation facility, discussed below. *See* 35 Ill. Adm. Code 721.104.

Exclusion for Second-Party Reclamation. The 2008 DSWR amendments established two separate exclusions from the definition of solid waste for HSM transferred for reclamation

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[28] *Compare* 40 C.F.R. 260.10 (definition) (2015) (corresponding with 35 Ill. Adm. Code 720.110 (definition), before amendment) *with* 40 C.F.R. 261.4(a)(23)(i), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)(A), after amendment).

[29] 40 C.F.R. 261.4(a)(23)(i)(A), (a)(23)(i)(B), (a)(23)(i)(C) & (a)(23)(ii)(E), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)(A)(i), (a)(23)(A)(ii), (a)(23)(A)(iii) & (a)(23)(B)(v), after amendment).

[30] Spent hydrotreating and spent hydrorefining catalysts, respectively, from petroleum refining operations. *See* 40 C.F.R. 261.32(a) (2015) (corresponding with 35 Ill. Adm. Code 721.132(a)).

[31] *Compare* 40 C.F.R. 261.2(a)(2)(ii)(G) & 261.4(a)(23)(iv) (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B)(vii) & 721.104(a)(23)(D), before amendment) *with* 40 C.F.R. 261.4(a)(23), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23), after amendment).

[32] 40 C.F.R. 261.4(a)(23)(ii)(F), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)(B)(vi), after amendment).

[33] 80 Fed. Reg. 1694, 1706 (Jan. 13, 2015); *see* 40 C.F.R. 262.134(d)(4) & (g)(3)(v) (2015) (corresponding with 35 Ill. Adm. Code 262.134(d)(4)) & (g)(3)(E)).

by a person not under the control of the generator. For the purposes of this discussion, the Board will refer to HSM reclaimed by a person not under the control of the generator as "second-party reclaimed HSM."[34] One exclusion applied to second-party reclamation at a site within the U.S. *See* 40 C.F.R. 261.4(a)(24) (2015), as revised at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)). The other excluded HSM exported for reclamation outside the U.S. 40 C.F.R. 261.4(a)(25) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(25)).

The 2015 amendments to the DSWR extensively revised the requirements for exclusion of second-party reclaimed HSM from the definition of solid waste. USEPA has made three principal changes: (1) USEPA has confined second-party reclamation to a "verified reclamation facility" or a facility subject to hazardous waste T/S/D facility standards; (2) USEPA has confined intermediate handling of the HSM to a "verified intermediate facility"; and (3) USEPA eliminated the exclusion for HSM exported for reclamation outside the U.S. *See* 40 C.F.R. 261.4(a)(24), (a)(24)(v)(B) & (a)(25) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(24), (a)(24)(E)(ii) & (a)(25)); *see also* 80 Fed. Reg. 1694, 1711 (Jan. 13, 2015) (explaining that the facility managing the HSM must be subject to U.S. regulation). A reclamation facility or an intermediate facility becomes "verified" by obtaining a "variance" on petition to the regulatory authority. *See* 40 C.F.R. 260.31(d), 261.4(a)(24)(v)(B) & (a)(25) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.131(d) & 721.104(a)(24), (a)(24)(E)(ii) & (a)(25)).

Further, the conditions that apply to the 2015-amended second-party reclamation exclusion differ from those that applied to the second-party reclamation exclusion that USEPA initiated in 2008. First, the exclusion of second-party reclaimed HSM is not subject to exception of K171 and K172 wastes.[35] *Compare* 40 C.F.R. 261.4(a)(24)(iii) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)(C), before amendment) *with* 40 C.F.R. 261.4(a)(24)(iii) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)(C), after amendment). More importantly, USEPA removed the obligations formerly imposed on the generator to "make reasonable efforts" to ensure the positive intent and sound management of the intermediate and reclamation facilities and certify and document those efforts. *Compare* 40 C.F.R. 261.4(a)(24)(v)(B)-(a)(24)(v)(E) & (a)(24)(viii) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)(E)(ii)-(a)(24)(E)(v) & (a)(24)(H), before amendment) *with* 40 C.F.R. 261.4(a)(24)(v)(B)-(a)(24)(v)(E) & (a)(24)(viii) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)(E)(ii)-(a)(24)(E)(v) & (a)(24)(H), after amendment).

The Board has incorporated the revised exclusion for second-party reclaimed HSM into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal exclusion. All deviations from the federal text are listed in Table 3 below in this opinion.

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[34] The phrase "second-party reclamation" refers to reclamation of second-party reclaimed HSM. While the status of the facility where the reclamation occurs determines applicability of the exclusion, the HSM is the object of the exclusion.

[35] *See supra* note 30 and accompanying text.

The following segments of discussion include consideration of only the more significant deviations.

Dow (PC 16) has requested that the Board eliminate the topical subheading of the existing language to avoid confusion. Even though the Board does not see a potential for confusion, the Board has made a slight change in the language to address Dow's concerns.

When adopting the original version of the exclusion for HSM transferred off-site for reclamation with the 2008 DSWR rule, the Board added the topical subheading, "Hazardous secondary materials transferred off-site for recycling" to the preamble statement for the exclusion. *See* RCRA Subtitle C Update, USEPA Amendments (July 1, 2008 through December 31, 2008 and June 15, 2010), R09-16, RCRA Subtitle C Update, USEPA Regulations (January 1, 2009 through June 30, 2009), R10-4 (Oct. 7, 2010) (consol.), slip op. at 289 (table of revisions to federal text). Dow's concern is that use of the word "recycling" could imply that "direct reuse" falls within this exclusion. Recycling includes use or reuse, as well as reclamation. *See* 35 Ill. Adm. Code 721.101(c)(7).

The federally derived text of the preamble to the exclusion, however, refers to "reclamation" as it begins to state the exclusion. Even though the Board believes that the likelihood for confusion is negligible, the Board has made the simple change from "recycling" to "reclamation" in the topical heading.

Administrative Determination Deeming a Facility "Verified." The "variance" that USEPA has provided for deeming a facility "verified" is an administrative determination made using the procedure prescribed in 40 C.F.R. 260.33 (corresponding with 35 Ill. Adm. Code 720.133) applying the factors set forth in 40 C.F.R. 260.31(d) (corresponding with 35 Ill. Adm. Code 720.131(d)). The appropriate administrative authority can deem an intermediate facility or a reclamation facility "verified" using a specified procedure and applying specified factors. USEPA codified the procedure in 40 C.F.R. 260.33, entitled "Procedures for variances from classification as a solid waste, for variances to be classified as a boiler, or for non-waste determinations." USEPA codified the factors in 40 C.F.R. 260.31, entitled "Standards and criteria for variances from classification as a solid waste." Differences between Illinois law and federal law require the Board to make minor changes in the language of the federal rules.

What USEPA calls a "variance" is different from a "variance," as intended under the Act. When establishing the procedure for hazardous waste delisting, the Board observed as follows:

> Board variances are temporary, are granted on a showing of arbitrary or unreasonable hardship and require a compliance plan. These are to be distinguished from "variances" provided in USEPA's RCRA rules which sometimes are permanent on a specific showing other than arbitrary or unreasonable hardship. RCRA Procedural Rules, R84-10 (Jan. 10, 1989), slip op. at 5.

The Board grants solid waste determinations, hazardous waste delistings, and non-waste determinations using the Act's adjusted standard procedure.[36] *See* 35 Ill. Adm. Code 720.122(n) & 720.133. Initially, the Board used the adjusted standard procedure of section 28.1 of the Act (Ill. Rev. Stat. ch. 111½, ¶ 1028.1 (1987) for the solid waste determinations. RCRA Update, USEPA Regulations April 24, 1984 through June 30, 1985), R85-22 (Jan. 9, 1986). The Board originally anticipated adopting federally granted hazardous waste delistings by rulemaking by using incorporation by reference.[37] After USEPA authorized Illinois to grant hazardous waste delistings in 1990 (55 Fed. Reg. 7320 (Mar. 1, 1990)), and Board adoption of procedural rules for adjusted standards (Procedural Rules Revision 35 Ill. Adm. Code 101,106 (subpart G), and 107, R88-5(B) (June 8, 1989)), the Board began using the adjusted standard procedure to grant hazardous waste delistings. RCRA Delistings, R90-17 (Feb. 28, 1991), slip op. at 4-5.

Then, USEPA incorporated a "non-waste determination" into the provision for solid waste determinations with the 2008 DSWR amendments (*see* 73 Fed. Reg. 64668, 64670 (Oct. 30, 2008)), which the Board added to the Illinois rules in RCRA Subtitle C Update, USEPA Amendments (July 1, 2008 through December 31, 2008 and June 15, 2010), R09-16, RCRA Subtitle C Update, USEPA Regulations (January 1, 2009 through June 30, 2009), R10-4 (Oct. 7, 2010) (consol.). Now, the 2015 DSWR amendments have added a "variance from classifying as a solid waste" HSM that are transferred to a "verified recycler" or "verified intermediate facility" for reclamation. USEPA added the criteria for granting this "variance" to the non-waste determination and solid waste determination provisions. 80 Fed. Reg. 1694, 1706-11 (Jan. 13, 2015); *see* 40 C.F.R. 260.31(d), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.131(d)).

Due to its different meaning under Illinois law, the Board has refrained from using "variance" where it appears in the federal provisions. The Board uses the adjusted standard procedure to determine "verified recyclers" and "verified intermediate facilities." *See* 35 Ill. Adm. Code 720.131(d) & 720.133 (derived from 40 C.F.R. 260.31(d) & 260.33 (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015).

Use of the Term "Verified Facility Determination." Since USEPA has paired this administrative verified facility determination with the solid waste determination and applies the determination to the reclaimed HSM, rather than to the reclamation facility and any intermediate facility managing the HSM (*see* 40 C.F.R. 260.31(d) & 260.33(c), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015)), the Board proposed referring to this administrative determination as a "solid waste determination." *See* 35 Ill. Adm. Code 720.131(d) & 721.104(a)(24)(E)(ii) (derived from 40 C.F.R. 260.31(d) & 261.4(a)(24)(v)(B) (2015), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015). The Board followed this usage also in the emergency preparedness and response provisions applicable to facilities operating under the second-party reclamation exclusion, substituting "solid waste determination" in the Illinois rules for each appearance of "verified

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[36] The Board did not draw from the federal variance procedure for hazardous waste delistings. Rather, the delisting procedure derives from 40 C.F.R. 260.22.

[37] The Board was uncertain of authority of the State to adopt hazardous waste delistings. RCRA Delistings, R90-17 (Feb. 28, 1991), slip op. at 3.

recycler variance" in the federal rules. *See* 35 Ill. Adm. Code 721.500(a) & (b); 721.510(e), (f)(1) & (f)(2); 721.511(d)(3) & 721.520(a)(1) & (b)(2) (corresponding with 40 C.F.R. 261.400(a) & (b); 261.410(e), (f)(1) & (f)(2); 261.411(d)(3) & 261.420(a)(1) & (b)(2)).

The Agency observed in PC 14 that solid waste determinations and non-waste determinations are material-specific determinations, while the determination that a facility is a verified reclamation facility or a verified intermediate facility is a facility-specific determination. The Agency opined that there is a potential for confusion that the verified facility determination is material-specific. The Agency said that calling the determinations a "verified reclamation facility determination" and a "verified intermediate facility determination" would reduce the potential for confusion.

Uniform Use of the Term "Verified." The Board has further changed segments of the text to use "verified reclamation facility" and "verified intermediate facility" as defined terms. The Board believes that these changes add clarity to the exclusion for second-party reclaimed HSM. In 40 C.F.R. 261.4(a)(24)(v)(B), USEPA defines the phrase "verified reclamation facility" as one that has obtained the administrative determination provided by 40 C.F.R. 260.31(d). The Board added quotation marks to the defined term to make it clear that this provision defined the term in corresponding 35 Ill. Adm. Code 721.104(a)(24)(E)(ii). This provision in 40 C.F.R. 261.4(a)(24)(v)(B) continues to provide that any intermediate facility through which the HSM passes must have been granted the administrative determination provided by 40 C.F.R. 260.31(d). The Board reworded corresponding 35 Ill. Adm. Code 721.104(a)(24)(E)(ii) to require that the facility must be a "verified intermediate facility," placing the phrase in quotation marks and making minor changes in the wording, to clarify that this segment defines the term. The Board also changed "verified reclamation facility or intermediate facility" in 40 C.F.R. 260.30(f) and 260.31(d) to "verified reclamation facility or verified intermediate facility" in corresponding 35 Ill. Adm. Code 720.130(f) and 720.131(d).

Alternative Management at a T/S/D Facility. The second-party reclamation exclusion provides an alternative to reclamation at a verified reclamation facility and management at a verified intermediate facility. The reclamation and/or management can occur at a T/S/D facility. This impacts the language used by USEPA in different provisions. In 40 C.F.R. 261.4(a)(24)(v)(B), management of the second-party reclaimed HSM can occur at a facility "where management of the hazardous secondary material is addressed under a RCRA Subpart B permit or interim status standards." The Board changed the focus to uniformly refer to the applicable standards for hazardous waste management, 35 Ill. Adm. Code 724, 725, 726, and 727, in corresponding 35 Ill. Adm. Code 721.104(a)(24)(E)(ii). The Board assumes that USEPA intended to allow management of the HSM at a facility regulated under T/S/D facility standards, and does not intend to limit this to management under the standards of 40 C.F.R 264 and 265 only.

The provisions for the administrative determination of a verified facility reflect that the determination is not necessary for a facility regulated under the T/S/D facility standards. Both 40 C.F.R. 260.30(f) and 260.31(d) provide that the solid waste determination is available only where management of the HSM "is not addressed under a RCRA Part B permit or interim status standards." Similarly to the federal language in 40 C.F.R. 261.4(a)(23)(v)(B) discussed above,

the Board changed the language in corresponding 35 Ill. Adm. Code 720.130(f) and 721.131(d) to state, "is not regulated by any of 35 Ill. Adm. Code 724, 725, 726, or 727."

Exclusion for Second-Party Solvent Remanufacturing. The 2015 DSWR amendments established a separate exclusion from the definition of solid waste for HSM that is transferred to a second party for remanufacturing. It is possible that the remanufacturing exclusion derives from the broad 2008 exclusion for second-party reclamation, although the 2015 remanufacturing exclusion is highly specialized. In fact, even though the remanufacturing exclusion refers to HSM, nowhere does the exclusion use "reclaim" or any derivatives of that term. This is despite the fact that "reclaimed" is the only waste-management related term defined in the hazardous waste regulations that would apply to the activity.[38]

This exclusion is limited in its scope. In its simplest logical format, momentarily considering only the description of the HSM to which the exclusion applies (and ignoring the conditions), the exclusion pertains only to the following solvents:

1) The HSM is one or more of 18 specified commercial grade organic solvents;[39]

2) The HSM is generated from:

    a) One of four specified uses;[40]

    b) In one of four specified manufacturing sectors;[41]

4) Remanufacturing of the HSM occurs only at a remanufacturer in one of the four specified industry sectors; and

5) After remanufacturing, use of the resulting solvent product must be limited to:

    a) Option 1:

        i) One of the four specified uses; and

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[38] *See supra* note 12 and accompanying text.

[39] Toluene, xylenes, ethyl¬benzene, 1,2,4-trimethyl¬benzene, chloro-benzene, n-hexane, cyclo¬hexane, methyl tert-butyl ether, aceto-nitrile, chloro¬form, chloro¬methane, dichloro¬methane, methyl iso-butyl ketone, N,N-dimethyl¬form¬amide, tetra¬hydro¬furan, n-butyl alcohol, ethanol, or methanol.

[40] Reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these chemical functional uses).

[41] Pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), or paints and coatings manufacturing (NAICS 325510).

ii) In one of four specified manufacturing sectors; or

b) Option 2: Use as an ingredient in a product.

c) The allowed use must correspond with one of the Toxic Substances Control Act (TSCA)-specified (high value) chemical functional uses;[42] and

d) The use does not involve a specified low-value Toxic Substances Control Act (TSCA)-specified chemical functional use.[43]

40 C.F.R. 261.4(a)(27), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)).

Specified operational conditions apply to the generator and remanufacturer. Those conditions are listed in the entry for HSM transferred for remanufacturing in Table A below in this discussion. Chiefly, the HSM generator and the remanufacturer must (1) submit a notification of activity to USEPA;[44] (2) develop and maintain a written remanufacturing plan;[45] store the HSM in tanks and containers that meet specified standards;[46] and (3) not engage in

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[42] Those specified in the TSCA regulations (*see* 40 CFR 711.15(b)(4)(i)(C) (2015), specifically including Industrial Function Category Code U015 (solvents consumed in a reaction to produce other chemicals) or U030 (solvents that become part of the mixture). 40 C.F.R. 261.4(a)(27)(iv), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)(D)); *see* 40 CFR 711.15(b)(4)(i)(C) (2015) (list of industrial function category codes).

[43] Cleaning or degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles, corresponding with Industrial Function Category Code U029 (solvents (for cleaning and degreasing). 40 C.F.R. 261.4(a)(27)(v), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)(E)); *see* 40 CFR 711.15(b)(4)(i)(C) (2015) (list of industrial function category codes).

[44] As required by 40 C.F.R. 260.42 (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.142). Using USEPA Form 8700-12, "Notification of RCRA Subtitle C Activity." Each must repeat the notification biennially.

[45] That includes specified information and a certification statement.

[46] Prior to remanufacturing, the standards of new subparts I and J of 40 C.F.R. 261, as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.Subparts I and J). Both prior to and during remanufacturing, the Clean Air Act standards of 40 C.F.R. 60, 61, and 63 or new subparts AA, BB, and CC of 40 C.F.R. 261, added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.Subparts AA, BB, and CC). See discussion below.

speculative accumulation.[47] 40 C.F.R. 261.4(a)(27)(vi), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)(F) & (a)(27)(G)).

USEPA drew heavily from the hazardous waste T/S/D facility standards for the tank and container standards that apply as conditions to the remanufacturing exclusion.[48] They add 51 new sections to the rules that span about 36 pages of *Federal Register* text. *See* 80 Fed. Reg. at 1777-1814. The Board has incorporated the HSM solvent remanufacturing exclusion into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal exclusion. All deviations from the federal text are listed in Table 3 below in this opinion. The following segments of discussion include consideration of only the more significant deviations.

The Board has incorporated the exclusion for remanufactured solvent HSM into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal exclusion. All deviations from the federal text are listed in Table 3 below in this opinion. The following segments of discussion include consideration of only the more significant deviations.

Some aspects of the exclusion for solvent remanufacturing presented the Board with challenges. The challenges relate to USEPA drawing from TSCA provisions to define the scope of the exclusion and the air emissions control provisions borrowed from the T/S/D facility standards. In fact, dealing with the air emissions standards applicable to the remanufactured solvents disclosed problems with the T/S/D facility standards themselves.

Defining Chemical Functional Uses. The scope of the remanufacturing exclusion is limited to specified "chemical functional uses" and a group of chemical functional uses is excepted from the exclusion. USEPA identifies the chemical functional uses as follows:

> These allowed uses correspond to chemical functional uses enumerated under the Chemical Data Reporting Rule of the Toxic Substances Reporting Rule or the Toxic Substances Control Act (40 CFR parts 704, 710-711), including Industrial Function Codes U015 (solvents consumed in a reaction to produce other chemicals) and U030 (solvents become part of the mixture). 40 C.F.R. 261.4(a)(27)(iv), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)(D)).

The Board is compelled to define the chemical functional uses. This requires either incorporating descriptive language into the rule or incorporating by reference to descriptions of the chemical functional uses. USEPA refers to a TSCA rule and broadly cites to TSCA

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[47] As defined by 40 C.F.R. 261.1(c)(8) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.101(c)(8)).

[48] USEPA explained that the management standards of subparts I and J of 40 C.F.R. 261 are "the same as" those of subparts I and J of 40 C.F.R. 264 and 265, and the air emissions control standards of subparts AA, BB, and CC of 40 C.F.R. 261 are "equivalent to" those of subparts AA, BB, and CC of 40 C.F.R. 264 and 265. USEPA made changes to conform rules drafted for the context of hazardous waste management to the new context of HSM remanufacturing. 80 Fed. Reg. at 1718-19.

regulations. The Board's examination of the TSCA regulations disclosed that nothing in 40 C.F.R. 704 or 710 describes chemical functional uses or Industrial Function Codes. One segment of 40 C.F.R. 711 lists use-based "Industrial Function Categories." *See* 40 C.F.R. 711.15(b)(4)(i)(C) table 8 (2015).

The Board has assumed that the codes associated with the "Industrial Function Categories" set forth in the table in the TSCA Inventory Update Rule[49] are the "Industrial Function Codes" that USEPA intends to use to define "chemical functional uses" in 40 C.F.R. 261.4(a)(27)(iv) and (a)(27)(v). To add clarity, the Board has changed these references to "Industrial Function Category codes" in corresponding 35 Ill. Adm. Code 721.104(a)(27)(iv) and (a)(27)(v). The Board has then narrowed the reference to the TSCA Inventory Update Rule and incorporated by reference to 40 C.F.R. 711.15(b)(4)(i)(C).

The Board reads new 40 C.F.R. 261.4(a)(27)(iv) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)(D)) as expansive. The Board believes that USEPA refers to all of the Industrial Function Category Codes (chemical functional uses) listed in 40 C.F.R. 711.15(b)(4)(i)(C) table 8. The Board interprets that the specific citations to Industrial Function Category Codes U015 and U030 are intended for special emphasis, not to limit consideration to those two chemical functional uses. This is underscored by subsection (a)(27)(v) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)(E)), which describes, then excepts, one of the uses in table 8.[50]

Thus, the Board believes that all of the chemical functional uses are defined by the Industrial Function Categories in 40 C.F.R. 711.15(b)(4)(i)(C) table 8. The table associates a code with each of the Industrial Function Categories listed in that table. In 40 C.F.R. 261.4(a)(27)(v), USEPA has excepted only the chemical functional use associated in table 8 with the code "U029" (solvents for cleaning and degreasing) from the chemical functional uses that fall under the remanufacturing exclusion. The Board appended a Board note that states this view.

Notification of Waste Activity. The requirement for generator and remanufacturer notice, 40 C.F.R. 261.4(a)(27)(vi)(A) requires notice to "EPA or the State Director." The referenced notice requirement in 40 C.F.R. 260.42, however, requires notice to the USEPA Regional Administrator using EPA Form 8700-12.[51] 40 C.F.R. 260.42(a) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.142(a)).

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[49] In the proposed remanufacturing exclusion rule, USEPA relied on the then-proposed TSCA Inventory Update Rule for defining chemical functional uses. 76 Fed. Reg. 44094, 44133 (July 22, 2011). USEPA adopted the Inventory Update Rule, including 40 C.F.R. 711.15, shortly afterward. 76 Fed. Reg. 50816 (Aug. 16, 2011).

[50] The Board observes that both of these two chemical functional uses involve consumption of the solvent into the resulting product. *See* 76 Fed. Reg. , 44133 notes 33 & 34 (July 22, 2011).

[51] EPA Form 8700-12 itself allows notification to the State if USEPA has authorized the State program. Determining if You Must Notify, *Notification of RCRA Subtitle C Activity: Instructions and Form*, EPA Form 8700-12 (Jan. 2015) at p. 6.

The Board drafted the remanufacturing exclusion to require notification to both USEPA Region 5 and the Agency. 35 Ill. Adm. Code 721.104(a)(27)(vi)(A); *see also* 35 Ill. Adm. Code 721.296(c)(1) & (c)(3) (requiring parallel reporting of releases). This follows the language of 35 Ill. Adm. Code 720.142(a), which requires a facility that manages HSM to obtain Form 8700-12 from the Agency and submit notification to USEPA Region 5—presumably causing both the State and USEPA receive notification.

Standards Applicable to Tanks and Containers Used to Manage HSM. The 2015 DSWR amendments impose standards for use and management of tanks and containers as conditions of the remanufacturing exclusion.[52] *See* 40 C.F.R. 261.4(a)(27)(vi)(D), 261.170 & 261.190(a), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)(F)(iv), 721.270 & 721.290(a)). USEPA appended a note to 40 C.F.R. 261.193(a) that explains the regulatory status of material collected by a secondary containment system. The note states that hazardous waste requirements apply to collected material that is hazardous waste, and Clean Water Act requirements apply to collected material discharged to waters of the United States or into the collection system of a publicly owned treatment works. The Board revised the citation to hazardous waste requirements to include the standardized permit facility standards of 35 Ill. Adm. Code 267, which USEPA omitted. The Board further revised the citations to Clean Water Act requirements to citations to Illinois law and regulations. This copies the language relating to Clean Water Act requirements that the Board used in the parallel provisions of the T/S/D facility standards. *See* 35 Ill. Adm. Code 724.293(a) Board note & 725.293(c)(4) Board note.

The use of tank provisions imposes the standards of the National Fire Protection Association's Flammable and Combustible Liquids Code (NFPA 30) on tanks used to manage HSM that is ignitable or reactive. USEPA uses the 1977 or 1981 versions of NFPA 30. 40 C.F.R. 261.198(b), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015); *see* 40 C.F.R. 264.198(b) & 265.198(b) (2015) (the parallel provisions in the T/S/D facility standards using the 1977 or 1981 versions). For the purposes of the provision that the Board has added to correspond with this USEPA requirement, the Board has incorporated by reference the 1984, 1987, and supplemented 2003 versions of NFPA 30. The Board previously incorporated by reference the supplemented 2003 version of NFPA for the purposes of 35 Ill. Adm. Code 721.298 and 724.298. *See* 35 Ill. Adm. Code 720.111(a). The Board now adds the 1984 and 1987 versions, which are in the Board's library.[53]

Constituent-Specific Adjustment Factors for Gauging Air Emissions. An aspect of the requirements applicable to tanks and containers used to store HSM under the remanufacturing exclusion poses difficulty for the Board in incorporating these requirements. The 40 C.F.R. 261, subpart CC emissions control standards applicable provide for discretionary use of constituent-specific adjustment (f_{m25D}) factors to adjust measured emissions before determining

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[52] *See supra* note 48 and accompanying text.

[53] The Board has the July 14, 1984 and August 7, 1987 versions of NFPA 30 in folder 4 of the exhibits in R84-17.

compliance.[54] 40 C.F.R. 261.1083(a)(3)(iii), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.983(a)(3)(C)). Application of the factor adjusts measured data to correspond with the average volatile organic (VO) concentration that would have been obtained using Clean Air Act Reference Method 25D, in Appendix A-7 to 40 C.F.R. 60 (New Source Performance Standards). *See* 40 C.F.R. 261.1083(a)(4)(iii), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.983(a)(4)(C)).

It is desirable that the owner or operator of a facility would be able to apply the constituent-specific adjustment factor. The Board sees three options for incorporating this flexibility into the Illinois rule: (1) incorporate the language of the federal provision into the Illinois rule; (2) omit the provision for use of f_{m25D} factors to adjust data; (3) incorporate by reference a list of f_{m25D} factors or codify the f_{m25D} factors in a table or appendix to the rules; or (4) allow the Agency to approve use of f_{m25D} factors in writing, which would flow from the Agency's authority to issue permits.[55] Two significant problems eliminate the first and third of these options.

The first problem eliminates the option of using the language of 40 C.F.R. 261.1083(a)(3)(iii). The federal rule directs attention to a specified office within USEPA[56] to obtain the f_{m25D} factors. 40 C.F.R. 261.1083(a)(3)(iii), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.983(a)(3)(C)). This is flawed for two reasons. First, the Board cannot direct attention to USEPA to determine the scope and substance of Illinois rules. The Board must either codify a standard or direct attention by way of incorporation by reference to an existing, written standard. 5 ILCS 100/5-10 & 5-75(a) (2014); *see* 5 ILCS 100/1-70 (2014) (definition of "rule"). Even then, the Board is constrained to incorporate by reference to a specific version or edition, and later versions or editions cannot be included in the incorporation by reference. 5 ILCS 100/5-75(a) (2014). Second, the USEPA

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[54] The standard requires summing the concentrations of all compounds that have volatility above a specified threshold. The f_{m25D} fractional factor is multiplied the measured concentration of higher-volatility compounds to discount the effect of lower-volatility compounds on the measured volatile organic material concentration in a sample. *See* 40 C.F.R. 261.1083(a)(3)(iii), as added at 80 Fed. Reg. 1694 (Jan. 13, 2015); *see also* 40 C.F.R. 265.1084(a)(3)(iii) (2015) (similar provision in T/S/D facility standards); Method 25D in Appendix A-7 to 40 C.F.R. 60 (2015) (the analytical method to whose results the factor is applied).

[55] The Board has not considered using Board rulemaking or adjusted standard authority for case-by-case basis because either would be cumbersome and resource-intensive. Further, as discussed below, case-by-case Board determinations are not necessary.

[56] The Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC.

office identified in the federal rule appears to have disappeared after 2005.[57] To date, the Board has been unable to locate this office or a successor office within USEPA. *See* PC 1 & PC 2.

The second problem eliminates the option of incorporation by reference or incorporating a list of f_{m25D} factors into the Illinois rules. The Board has not located a written document that identifies f_{m25D} factors. Incorporation by reference would require reference to a document listing these factors, such as a rule or regulatory guidance document.[58] The Board found that USEPA proposed a listing of f_{m25D} factors for about 1,150 chemical compounds in 1998, but USEPA never adopted the list.[59] The Board examined that proposed list,[60] but determined not to use the list as a source to create an appendix or table in the Illinois rules that can provide f_{m25D} factors for regulated entities.

The Board is reluctant to eliminate a feature of a federal rule that gives flexibility to regulated entities or which eases the burden of compliance. This eliminates the second option of omitting the provision that allows use of f_{m25D} factors.

The Board selects the fourth option, which allows Agency approval of f_{m25D} factors for use by regulated entities. The Board observes that as with other Agency determinations under

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[57] The last *Federal Register* notice published that refers the reader to this group for additional information appeared over 10 years ago. *See* 70 Fed. Reg. 77116, 77117 (Dec. 29, 2005). However, later notices have proposed rules that directed attention to the Waste and Chemical Processes Group for constituent-specific adjustment factors. *See* 80 Fed. Reg. 1693, 1799 (Jan. 13, 2015) (adding 40 C.F.R. 261.1083(a)(3)(iii) in the instant DSWR amendments); 71 Fed. Reg. 69011, 69021 (Nov. 29, 2006) (note e to revised table 1 to subpart GGGGG of 40 C.F.R. 63, directing attention for F_{m305} factors); 71 Fed. Reg. 25531, 25543 (May 1, 2006) (proposing revisions to GGGGG of 40 C.F.R. 63); *see also* note e to table 1 to subpart GGGGG of 40 C.F.R. 63 (2015) (still directing attention to this office).

[58] USEPA codified "f_m 305" factors for about 96 hazardous air pollutants (HAPs) in table 1 to subpart DD (Off-Site Waste and Recovery Operations) of 40 C.F.R. 63 (2015) and for about 106 HAPs in table 1 to subpart GGGGG (Site Remediation) of 40 C.F.R. 63 (2015), but those are associated with Method 305, in Appendix A to 40 C.F.R. 63, not Reference Method 24D. USEPA further codified "f_m" factors for about 75 hazardous air pollutants in table 34 to subpart G (Synthetic Organic Chemical Manufacturing) of 40 C.F.R. 63 (2015), but those also are associated with Method 305.

[59] USEPA proposed New Source Performance Standards (NSPS) for wastewater processes in the Synthetic Organic Chemical Manufacturing Industry sector. That rule would have added tables 1 and 2 in a new appendix J to 40 C.F.R. 60 for determining Henry's Law constants for chemicals. Appendix J would have listed "Fm 25D" and "Fm 305" factors for 235 low-volatility and 915 higher-volatility compounds. *See* 63 Fed. Reg. 67988, 68069-86 (Dec. 9, 1998).

[60] The Board found a separate draft version of that list, dated 2005, in a search of USEPA's website. http://www3.epa.gov/ttn/atw/nsps/socww/pt60appj.pdf. Although USEPA may have revised the list since 1998, brief examination did not indicate any changes.

the remanufacturing exclusion, discussed below, written Agency authorization of use of f_{m25D} factors is a required Agency determination in the nature of a permit decision made pursuant to section 39(a) of the Act (415 ILCS 5/39(a)),[61] that would be subject to appeal to the Board pursuant to section 40(a) of the Act (415 ILCS 5/40(a) (2014)).[62] *See* 35 Ill. Adm. Code 702.107. The Board observes further that the Agency authorizing use of f_{m25D} factors does not rise to the level of delegating standards to the Agency. *See* Granite City Div. National Steel Co. v. Pollution Control Board, 155 Ill. 2d 149, 613 N.E.2d 719, 184 Ill. Dec. 402 (Ill. 1993).

The Board discovered the above problem with f_{m25D} factors in an existing T/S/D facility standard while incorporating the provisions for use of f_{m25D} factors into 35 Ill. Adm. Code 721.983(a)(3)(C) and (a)(4)(D). USEPA drew from 40 C.F.R. 265.1084(a)(3)(iii) for the language of 40 C.F.R. 261.1083(a)(3)(iii). PC 1; *see* 80 Fed. Reg. 1693, 1718 (Jan. 13, 2015). For this reason, corresponding 35 Ill. Adm. Code 725.984(a)(3)(iii) refers regulated entities to the now-non-existent USEPA office for f_{m25D} factors. The Board revised this provision in the T/S/D facility standards to mirror that in new 35 Ill. Adm. Code 261.983(a)(3)(iii).

The Agency (PC 14) stated that allowing the Agency to approve f_{m25D} factors would be problematic for two reasons. First, the Agency does not have USEPA authorization to implement the air emission standards of Subpart CC of 35 Ill. Adm. Code 724.[63] This implies that the Agency will not have USEPA authorization to implement the Subpart CC standards added to 35 Ill. Adm. Code 721. Second, the Agency observes that lacking a list of f_{m25D} factors, the Agency would be forced to make case-by-case determinations. The Agency further points out that the Board has failed to outline a methodology for Agency determinations. The Agency concludes that the Board must either disallow use of the constituent-specific adjustment factors or include a listing of f_{m25D} factors in the rules. The Agency points out that the f_{m25D} factors that USEPA proposed in 1998 include factors for a large number of chemicals, and USEPA outlined a methodology by which a regulated entity can determine f_{m25D} factors.

The Board agrees with the Agency that lacking a list of f_{m25D} factors, case-by-case determinations will be necessary if the Board is to confer the benefit of using the factors on regulated entities in Illinois. In this regard, both the Board and the Agency are victims of multiple facts: (1) USEPA has casually referred to a USEPA office to obtain f_{m25D} factors; (2) the USEPA office cited no longer exists, and the Board has been unable to find a successor office; (3) USEPA proposed a methodology for determining f_{m25D} factors and listed the factors for hundreds of chemicals, but nearly 18 years later, USEPA has not adopted that methodology

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[61] This would not be a RCRA permit issued under section 39(d) (415 ILCS 5/39(d)).

[62] Subsection (a)(2) would apply to any such appeal made under subsection (a). *See* 415 ILCS 5/40(a)(2) & (a)(3) (2014).

[63] The f_{m24D} factors are applied under the interim facility standards of 35 Ill. Adm. Code 725.984(b)(3)(C). The permitted facility standards at 35 Ill. Adm. Code 724.983(a)(2) and (b)(2) reference the interim facility standards for waste determination procedures.

and lists[64]; and (4) the Board must go forward with the 2015 DSWR amendments within the scope of the identical-in-substance mandate of sections 7.2 and 22.4(a) of the Act (415 ILCS 5/7.2 and 22.4(a) (2014)).

The Board has three alternatives, and the Board must pursue the alternative that most closely fulfills the identical-in-substance mandate for RCRA Subtitle C rules. The Board's preference is to adopt proposed 35 Ill. Adm. Code 721.983(a)(3)(C) and the proposed amendments to 35 Ill. Adm. Code 725.983(a)(3)(C) with only minor changes in the text. The other alternatives are flawed and would require Board action outside the scope of the identical-in-substance mandate.

One alternative that the Board cannot pursue is to codify USEPA's proposed methodology for determining f_{m25D} factors and table of factors in a table or appendix in the Illinois rules,[65] since USEPA has not yet adopted the methodology and list of f_{m25D} factors. The statutory provision for identical-in-substance rulemaking provides in pertinent part as follows:

> [T]he Board shall adopt the verbatim text of such USEPA regulations as are necessary and appropriate for authorization of the program. In adopting "identical in substance" regulations, the only changes that may be made by the Board to the federal regulations are those changes that are necessary for compliance with the Illinois Administrative Code, and technical changes that in no way change the scope or meaning of any portion of the regulations, except as follows:
>
> * * *.
>
> If a USEPA rule prescribes the contents of a State regulation without setting forth the regulation itself, which would be an integral part of any regulation required to be adopted as an "identical in substance" regulation as defined in this Section, the Board shall adopt a regulation as prescribed, to the extent possible consistent with other relevant USEPA regulations and existing State law. . . . 415 ILCS 5/7.2(a) & (a)(3) (2014).

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[64] The USEPA website for the SOCMI wastewaters emissions rule indicates the last action with regard to the proposed rule was a proposed amendment in 2004. https://www3.epa.gov/airtoxics/nsps/socww/socwwpg.html; *see* 69 Fed, Reg. 39383 (June 30, 2004). Another USEPA document posted on the SCOMI wastewater emissions webpage indicates that USEPA generated revised staff draft of proposed Appendix J to 40 C.F.R. 60 in 2005. https://www3.epa.gov/ttn/atw/nsps/socww/pt60appj.pdf.

[65] Only the values listed in one of the two tables in proposed appendix J to 40 C.F.R. 60 is pertinent. The data adjustment allowed for emissions from tanks and containers are for chemicals that have a Henry's Law constant greater than or equal to 0.1 Y/X. *See* 40 C.F.R. 261.1083(a)(3)(iii) and 265.1083(a)(3)(iii) (corresponding with 35 Ill. Adm. Code 721.983(a)(3)(iii) and 725.983(a)(3)(iii)). The f_{m25D} factors for those chemicals are listed in table 2. *See* 63 Fed. Reg. 67988, 68068 (Dec. 9, 1998) (at ¶ 2.2.1 of proposed appendix J to 40 C.F.R. 60).

Adoption of the USEPA-proposed f_{m25D} factors and methodology for deriving factors is outside the scope of either verbatim text or the prescribed content of a USEPA-required State regulation.

Another alternative is for the Board to omit the emissions adjustment procedure that uses the f_{m25D} factors from 35 Ill. Adm. Code 721.983(a)(3)(C) and remove it from 35 Ill. Adm. Code 725.983(a)(3)(C). Doing so would render the Illinois rules more stringent than their federal counterparts. The identical-in-substance mandate applicable to RCRA Subtitle C hazardous waste rules provides as follows:

> The Board may adopt regulations relating to a State hazardous waste management program that are not inconsistent with and at least as stringent as the Resource Conservation and Recovery Act of 1976 (P.L. 94-580), or regulations adopted thereunder. Regulations adopted pursuant to this subsection shall be adopted in accordance with the provisions and requirements of Title VII of this Act and the procedures for rulemaking in Section 5-35 of the Illinois Administrative Procedure Act. 415 ILCS 5/22.4(b) (2014).

Under this provision, the Board cannot use the identical-in-substance rulemaking procedure to establish hazardous waste requirements that are more stringent than the corresponding federal provisions.

The Board would be willing to drop the provision allowing use of the f_{m25D} factors to adjust measured emissions under circumstances where there is no alternative to pursuing identical-in-substance rulemaking but by dropping the factors. That is not the situation here. A viable alternative exists that allows emissions data adjustments. Further, as a general practice, the Board strives to instill in identical-in-substance rules whatever flexibility USEPA would allow—so long as that flexibility can fit into the Illinois regulatory scheme.

The Board revises the language to ease the burden of allowing use of the constituent-specific adjustment factors. As originally proposed, the rule would have allowed use of "constituent-specific adjustment factors (f_{m25D}) obtained in writing from the Agency." This is an error in drafting that would have imposed an unreasonable burden on the Agency. What the Board intended was simply that a regulated entity would only be able to use factors approved by the Agency. The Board believes that the entity wishing to use a factor should submit that factor to the Agency for approval. The Agency has both the resources and expertise to approve actions of regulated entities.

For the above reasons, the Board has retained the provisions that allow use of f_{m25D} factors for emissions data adjustments. The Board has made a small change in the language of the adopted rule that shifts the burden for deriving or obtaining f_{m25D} factors onto the entity that wishes to use the factors. The Board revised the pertinent segments of 35 Ill. Adm. Code 721.983(a)(3)(C) and 725.983(a)(3)(C) to allow the use of "constituent-specific adjustment factors (fm_{25D}) approved in writing by the Agency."

Agency Determinations under the Remanufacturing Exclusion. Just as the Board has drafted the rule so that the Agency will authorize use of f_{m25D} factors, the remanufacturing exclusion includes several provisions for decision-making by the regulatory authority. While the

federal rules provide that the Regional Administrator will make the determinations,[66] the Board has provided that the Agency will make determinations that are not reserved to the Board. The Agency decision-making provisions are the following:

35 Ill. Adm. Code 721.932(d), derived from 40 C.F.R. 261.1032(d): Provides for when the person managing HSM and the Regional Administrator do not agree on emissions, emissions reductions, or total organic compound concentrations.

35 Ill. Adm. Code 721.933(l)(1)(B)(ii), 721.952(e)(3), 721.953(i)(2), 721.957(f)(3), and 721.961(b)(1), derived from 40 C.F.R. 261.1033(l)(1)(ii)(B), 261.1052(e)(3), 261.1053(i)(2), 261.1057(f)(3), and 261.1061(b)(1): Provide for an Agency request for monitoring on a basis other than annually.

35 Ill. Adm. Code 721.934(c)(4), derived from 40 C.F.R. 261.1034(c)(4): Provides that the Agency may approve the use of averaging of results to determine compliance. The Board added explanation that the Agency approval or disapproval is subject to review by the Board under section 40 of the Act (415 ILCS 5/40).

35 Ill. Adm. Code 721.934(f), 721.963(f), and 721.983(a)(4)(D), derived from 40 C.F.R. 261.1034(f), 261.1063(f), and 261.1083(a)(4)(iv): Provide for when the person managing HSM and the Agency do not agree on the volatile organic content of the HSM.

35 Ill. Adm. Code 721.935(b)(4)(C), derived from 40 C.F.R. 261.1035(b)(4)(iii): Provides that any documentation of compliance must be based on engineering texts acceptable to the Agency.

35 Ill. Adm. Code 721.935(e) and 721.964(f), derived from 40 C.F.R. 261.1035(e) and 261.1064(f): Provide that the Agency will specify the appropriate recordkeeping requirements for emissions control equipment other than specified equipment.

35 Ill. Adm. Code 721.983(c)(3)(B)(v), derived from 40 C.F.R. 261.1083(c)(3)(ii)(E): Provides that the Agency may approve the use of alternative analytical methods.

35 Ill. Adm. Code 721.987(c)(6), derived from 40 C.F.R. 261.1087(c)(6): Provides for when the person managing HSM and the Agency do not agree on a demonstration of control device performance.

The fact that these determinations are required by the rules makes them subject to appeal or review by the Board. The RCRA and underground injection control (UIC) permit rules provide that any Agency determination required by the RCRA or UIC rules is subject to Board review. 35 Ill. Adm. Code 702.107(a). Those rules further provide that any Agency determination not required by the RCRA or UIC rules may not be reviewable by the Board. 35 Ill. Adm. Code 702.107(b). Each of the Agency determinations is required by a hazardous waste

[66] The various provisions differ in terms, using "agree," "request," "approve," "agree," "acceptable," "specify," or "approve." The common thread is that each involves an administrative determination.

rule, which enables Board review of the Agency determination as provided by the RCRA and UIC permit rules. *See* 35 Ill. Adm. Code 702.107(a). Accordingly, the Board has required that the Agency must submit the determination in writing.

The Agency (PC 14) commented that referring a regulated entity to the Agency for a written determination is problematic. The Agency states that RCRA permit authority derives from section 39(d) of the Act (415 ILCS 5.39(d)), and that the general permit determination authority of section 39(a) (415 ILCS 5/39(a)) does not apply to hazardous waste. The Agency also cites section 21(d) and (f) (415 ILCS 5/21(d) and (f)) as conferring permit authority, but those provisions are limited to prohibiting operation without a permit. The Agency points out that 35 Ill. Adm. Code 702.107 "clearly lays out procedures for permit appeals and Illinois EPA determinations." PC 14 at p. 4, ¶ 8.

The Agency's comments raise two related but distinct issues. First, what is the basis for the Agency's review and approval of actions by entities regulated under RCRA Subtitle C, but outside the scope of a RCRA permit? Second, what is the Board's authority to review such an Agency review and approval?

The Board has determined that (1) the Agency has authority to make the determinations assigned it in this proceeding; and (2) Board review is available for the various determinations the Agency will make. The Act mandates allocating the federally required determinations to the Agency for the purpose of maintaining Illinois hazardous waste regulations that are identical-in-substance to federal RCRA Subtitle C requirements. The authority to make a mandated determination flows from the need to allocate the determination and the natural function of the Agency or Board under the Illinois regulatory scheme. The Board does not need to determine today whether section 39(a) of the Act comes into play in the various Agency determinations assigned to the Agency by the present amendments or not.

All of the determinations that the Board has allocated to the Agency by today's amendments are made outside the ambit of a RCRA permit. Each is a final Agency action in the particular matter. Each of the determinations are required by the federal rules—even if some determinations would allow relaxation of the generally applicable requirement. *E.g.*, 35 Ill. Adm. Code 721.934(c)(4), 721.983(a)(3)(C) & 721.983(c)(3)(B)(v) (allowing data averaging, constituent-specific adjustment factors, and alternative analytical methods, respectively).

The Board observes that all of the determinations that the Board has allocated to the Agency relate to air emissions under the solvent reclamation exclusion of 35 Ill. Adm. Code 721.104(a)(27). *See* 35 Ill. Adm. Code 721.930 & 721.980. The solvents excluded are all high-value solvents. *See* 35 Ill. Adm. Code 721.104(a)(27)(E) (excluding solvents that will be used for degreasing or cleaning). Further, the generator and remanufacturer of the spent solvent and the end-user of the remanufactured solvent all must be within a narrow range of industrial classifications. *See* 35 Ill. Adm. Code 721.104(a)(27)(B)-(a)(27)(D) (pharmaceutical, basic organic chemical, plastics and resins, and paint and coatings manufacturing categories).

As an initial matter, the Board agrees that Agency authority to make RCRA permit determinations under section 39(d) of the Act is not implicated. A "RCRA permit" is defined in

a way that only includes the permits issued to T/S/D facilities.[67] *See* 415 ILCS 5/ 3.370; 42 U.S.C. § 6925(a) (2013). The RCRA permit contemplated by section 39(d) is limited to a hazardous waste T/S/D facility.

The interim status T/S/D facility standards of 35 Ill. Adm. Code 725 (corresponding with 40 C.F.R. 265) closely parallel the permitted facility standards of 35 Ill. Adm. Code 725 (corresponding with 40 C.F.R. 265). The Agency regulates interim status facilities and approves various actions of those facilities. *See, e.g.,* 35 Ill. Adm. Code 703.153(b) & 703.155(a). Many requirements in the interim status facility standards require Agency approvals in parallel to their counterpart requirements in the permitted facility standards require Agency approval by permit. *E.g., compare* 35 Ill. Adm. Code 725.212(c) *with* 35 Ill. Adm. Code 724.212(c) (closure plan amendment); 35 Ill. Adm. Code 725.243(a)(10) *with* 35 Ill. Adm. Code 724.243(a)(10) (reimbursement of closure costs); 35 Ill. Adm. Code 725.322 *with* 35 Ill. Adm. Code 724.322 (determination of action leakage rate). Illinois' federally derived RCRA Subtitle C definition of "permit" specifically excludes interim status. 35 Ill. Adm. Code 702.110 (corresponding with 40 C.F.R. 270.2). Agency determinations with regard to the operation of interim status T/S/D facilities are not subject to section 39(d) of the Act.

Beyond interim status facilities, USEPA requirements apply to facilities that do not receive RCRA permits. USEPA requires regulatory determinations relative to those facilities.

For example, hazardous waste regulations do not require a permit for a hazardous waste generator. Only generator notification of waste activity is required. *See* 35 Ill. Adm. Code 722.112. Still, Agency approval is required for generator accumulation beyond specified terms. *See, e.g.,* 35 Ill. Adm. Code 722.134(b) & (i). Further, the Agency may require the generator to submit reporting beyond what is required by Board rule. 35 Ill. Adm. Code 722.143. The Agency is not acting under authority of section 39(a) of the Act when making these determinations with regard to generators.

As another example, management of used oil and universal waste occur outside the scope of hazardous waste management. The Used Oil Rule and the Universal Waste Rule are alternatives to hazardous waste management. Yet the Agency actively regulates those entities, and the regulations applicable to them include provisions for Agency approvals of regulated activities. *See, e.g.,* 35 Ill. Adm. Code 733.118(g) (directing a facility how to manage an off-specification consignment of universal waste) & 739.124(a)(3) (determining the information sufficient for notification of used oil management).

Similarly, the federally derived RCRA Subtitle C regulations in this rulemaking require Agency determinations that are not RCRA permit determinations under section 39(d) of the Act. Each determination is required by USEPA, and each is in furtherance of implementing various federal hazardous waste requirements in Illinois.

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[67] A RCRA permit requires submission of Part A and Part B permit application and formal issuance of a permit. *See* 35 Ill. Adm. Code 703.180(a); 40 C.F.R. 270.10(f).

With the advent of exclusions from the definition of solid waste, and with reclamation-based exclusions in particular, the nature of the determinations has shifted. Whereas hazardous waste facility determinations in the past related to management of hazardous waste, an increasing number of determinations relate to management of hazardous secondary materials that are *not* hazardous waste.

There are early examples of Agency decision-making relative to hazardous secondary material that is not hazardous waste. The first was the exclusion for wood preserving waste that is reused on-site in the production process for their original purpose. If the generator loses the exclusion for failure to fulfill all applicable conditions to the exclusion, the Agency may approve an application for reinstatement, subject to Board review. 35 Ill. Adm. Code 721.104(a)(9) (corresponding with 40 C.F.R. 261.4(a)(9)). USEPA adopted the exclusion in 1990 (55 Fed. Reg. 50450 (Dec. 6, 1990)), and the Board did so in RCRA Update, USEPA Regulations (July 1, 1990 through December 31, 1990), R91-1 (Aug. 8, 1991).

Another was the Bevill exclusion for spent materials in primary mineral processing from which materials are recovered. The Bevill exclusion requires the Agency to allow management on drip pads.[68] 35 Ill. Adm. Code 721.104(a)(17) (corresponding with 40 C.F.R. 261.4(a)(17)). USEPA adopted the Bevill exclusion in 1998 (63 Fed. Reg. 28556 (May 26, 1998)), and the Board adopted it in RCRA Update, USEPA Regulations (July 1, 1995 through December 31, 1995), R96-10, UIC Update, USEPA Regulations (January 1, 1996 through June 30, 1996), R97-3, RCRA Update, USEPA Regulations (January 1, 1996 through June 30, 1996), R97-5 (Nov. 6, 1997) (consol.).

The 2015 DSWR amendments create a number of administrative determinations that apply to entities managing hazardous secondary material. The number of RCRA Subtitle C operational requirements that apply to materials that are not hazardous waste and to facilities that are not permitted T/S/D facilities has greatly expanded. The Board allocated some determinations to the Agency and retained others to itself, depending on the nature of the determination and the requirements of the Act. As stated by the Act:

> [T]he Board regulation shall specify whether a decision is to be made by the Board, the Agency, or some other State agency, based upon the general division of functions within this Act and other Illinois statutes. 415 ILCS 5/7.2(b)(5) (2014).

Nevertheless, the Board cannot authorize the Agency to perform functions that the Act does not authorize the Agency perform. The only authorities that the Board and the Agency possess are those conferred by statute. With regard to the Agency, the Act provides as follows:

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[68] The rule states, "The Agency must allow by permit . . . ." 35 Ill. Adm. Code 721.104(17)(D). The Board today corrects this statement by changing the words "by permit" to "in writing," in order to avoid confusion by implicating the RCRA permit as the mechanism for Agency approval.

> The Agency shall have the duty to administer, in accord with Title X of this Act, such permit and certification systems as may be established by this Act or by regulations adopted thereunder. 415 ILCS 5/4(g) (2014).

With regard to the Board, the Act provides similarly in pertinent part as follows:

> The Board shall have authority to conduct proceedings upon . . . petitions for review of final determinations which are made pursuant to this Act or Board rule and which involve a subject which the Board is authorized to regulate. The Board may also conduct other proceedings as may be provided by this Act or any other statute or rule. 415 ILCS 5/4(g) (2014); *see* Chicago Coke Co. v. Illinois EPA, PCB 10-75 (Sep. 2, 2010).

That the General Assembly did not expressly reference administrative approvals in the nature of permit or certification approvals is not decisive. The General Assembly drew the divisions of authority under the Act with a broad brush. The General Assembly found that it is within the interest of the State to have a federally authorized hazardous waste program. 415 ILCS 5/20(a)(8) (2014); *see* 415 ILCS 5/20(b) (2014) (stating the purposes of providing for sound waste management and promotion of land and resource conservation pursuant to federal RCRA). The General Assembly continued as follows:

> [T]he federal requirements for the securing of such hazardous waste management program approval, . . . [under RCRA Subtitle C and USEPA regulations] are complex and detailed, and the General Assembly cannot conveniently or advantageously set forth in this Act all the requirements of such federal Act or all regulations with may be established thereunder. 415 ILCS 5/20(a)(9) (2014).

Where the determination is in the nature of a permit or certification approval, the Board has assigned the determination to the Agency since the earliest stages of the Illinois hazardous waste program. *See, e.g.*, Proposed Regulations for RCRA, R81-22 (Feb. 4, 1982), slip op. at 27-29. The Act requires the Board to charge the Agency with such determinations. 415 ILCS 5/7.2(a)(5) (2014). Beginning with allocating decision-making roles for T/S/D facility closures, the Board routinely considered whether a particular decision should be made by the Board or Agency, including factors for how to allocate between the Agency and the Board. *See* RCRA Update, USEPA Regulations (July 1, 1989 through December 31, 1989), R90-2 (July 3, 1990), slip op. at 6-8. This practice has continued, and such a discussion is included in this opinion.

The Board provides for Board review of required agency determinations. The rule cited by the Agency states the general rule.

> Section 702.107 Permit Appeals and *Review of Agency Determinations*
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> Unless the contrary intention is indicated, all actions taken by the Agency pursuant to 35 Ill. Adm. Code 702 through 704, 721 through 728, 730, 733, 738, or 739 are to be done as part of an original permit application or a proceeding for modification of an issued permit. Such actions are subject to the procedural requirements of 35 Ill. Adm. Code 705.

a) Any final Agency action on an original permit application, a proceeding for modification of an issued permit, *or any action for review of a final Agency determination required by these regulations* may be appealed to the Board pursuant to Title X of the Environmental Protection Act [415 ILCS 5/Title X] and 35 Ill. Adm. Code 105 and 705.212.

b) Other actions that are not required by these regulations, whether undertaken by the Agency gratuitously or pursuant to a statutory authorization, such as one taken to enforce a bond, insurance policy, or similar instrument of a contractual nature or one intended to guide a regulated person in seeking compliance with the regulations, may not be permit modifications reviewable by the Board. The affected person may seek review of an Agency determination that is not a permit determination in any court of competent jurisdiction. 35 Ill. Adm. Code 702.107 (emphasis added).

As acknowledged by the Agency, this rule provides for Board review of Agency permit determinations and other Agency determinations that are required by the Subtitle C regulations. This rule does not confer decision-making authority on the Agency. The Agency derives that authority from the Act. This rule further does not confer review authority on the Board. The Board derives that authority from the Act. This rule simply states the fact that required determinations allocated to the Agency under the RCRA Subtitle C regulations are subject to Board review.

Revisions to Administrative Exclusions

In addition to adding an administrative determination for a verified reclamation facility and verified intermediate facility, USEPA revised segments of other reclamation-related administrative determination provisions. USEPA revised the partial reclamation exclusion and the procedures for granting administrative determinations.

Exclusion for Partially Reclaimed HSM. In 1985, USEPA added an exclusion from the definition of solid waste for HSM that has been reclaimed, but which requires further reclamation before recovery is completed. *See* 50 Fed. Reg. 614 (Jan. 4, 1985). This exclusion was available only by an administrative determination that the HSM is commodity-like after the initial reclamation processing. Factors considered for the determination included (1) the degree of processing the HSM has received and the further processing required; (2) the value of the material after reclamation; (3) how much the material is like an analogous material or raw material; (4) the extent to which a market for the reclaimed material is guaranteed; (5) the extent to which the reclaimed material is handled to minimize loss; and (6) other relevant factors. 40 C.F.R. 260.31(c) (2015) (corresponding with 35 Ill. Adm. Code 720.131(c)).

USEPA amended this partial reclamation exclusion in the 2015 DSWR amendments. The purpose was to clarify when the exclusion for partially reclaimed HSM is available. USEPA intended that the exclusion applies at the point the partially reclaimed HSM has become “more

like a commodity than a solid waste." USEPA observed that states had inappropriately granted the exclusion because the degree of reclamation had not sufficiently enhanced the value of the HSM to a commodity-like status.[69] *See* 80 Fed. Reg. 1694, 1733-34 (Jan. 13, 2015).

The Board has incorporated the revisions to the partially reclaimed HSM exclusion by administrative determination into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal exclusion. All deviations from the federal text are listed in Table 3 below in this opinion. The following paragraphs outline the changes that USEPA has made. The Board adds explanation of the few ambiguities that the Board perceives in the federal language where appropriate in the following segments of discussion.

Use of "Partially" Before "Reclaimed" and "Partial" Before "Reclamation." USEPA said that the focus of the value inquiry is on the HSM *after* the HSM has undergone partial reclamation processing, not after subsequent processing that completes the reclamation. *See* 80 Fed. Reg. 1694, 1734 (Jan. 13, 2015). By changing "reclaimed" to "partially reclaimed" and "reclamation" to "partial reclamation," USEPA has removed possible confusion that the focus is on the HSM after all steps of reclamation are completed. As revised, the factors for consideration now require the following: the "partial reclamation" must have produced a commodity-like product; the "degree of partial reclamation" must be substantial; the "partially-reclaimed material" must have sufficient economic value; the "partially reclaimed material" must be a viable substitute for a product or intermediate; the "partially-reclaimed material" must have a market; and the "partially-reclaimed material" must be handled to avoid loss. *See* 40 C.F.R. 260.31(c) (2105), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.131(c)).

The Board observes that USEPA hyphenated the compound adjective, "partially-reclaimed" in all appearances where it modifies the word "material." *See* 40 C.F.R. 260.31(c)(2), (c)(3), (c)(4) & (c)(5) (2105), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.131(c)(2), (c)(3), (c)(4) & (c)(5)). The general rule

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[69] The Board has granted several solid waste determinations under this exclusion. *See* Petition of Big River Zinc Corp. for an Adjusted Standard under 35 Ill. Adm. Code 720.131(c), AS 06-4 (May 2, 2002) (zinc oxide from electric arc furnace dust (EAFD)); Petition of World Recycling, Inc. d/b/a Planet Earth Antifreeze for an Adjusted Standard under 35 Ill. Adm. Code 720.131, AS 02-2 (May 2, 2002) (filtered used automotive antifreeze); Petition of Progressive Environmental Services, Inc. for an Adjusted Standard under 35 Ill. Adm. Code 720.131(c), AS 02-7 (Jan. 10, 2002) (filtered used automotive antifreeze); Petition of Horsehead Resource Development Company, Inc. for an Adjusted Standard Under 35 Ill. Adm. Code 720.131(c), AS 00-2 (Feb. 17, 2000) (zinc oxide from EAFD); Petition of Big River Zinc Corporation for an Adjusted Standard Under 35 Ill. Adm. Code 720.131(c), AS 99-3 (Apr. 15, 1999) (zinc oxide from EAFD); Petition of Recycle Technologies, Inc. for an Adjusted Standard, AS 97-9 (Sep. 3, 1998) (filtered used automotive antifreeze). The Board has no indication that any of these solid waste determinations was inappropriate. The Board has also denied a solid waste determination for partially reclaimed HSM. *See* Petition of Chemetco, Inc. for an Adjusted Standard from 35 Ill. Adm. Code 720.131(a) and (c), AS 97-2 (Mar. 19, 1998) (mixed metals-bearing wastewater treatment sludge, contaminated soils, and metals smelting slags from mixed metal scraps reclamation).

is that no hyphen is used for a compound adjective when the first element ends with "ly." *See The Chicago Manual of Style* ¶ 6.41 at 204 & table 6.1 at 221 (14th ed. 1993). While the Board would ordinarily follow the hyphenation rule and omit the hyphen, the Board has not done so in this instance. The Board believes that the hyphen strengthens the connection between the two elements of the compound.

Legitimate Recycling. USEPA has added the requirement for legitimate recycling as a precondition to the partial reclamation exclusion. *See* 40 C.F.R. 260.31(c) (2105), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.131(c)). As is discussed below, USEPA simultaneously amended the definition of legitimate recycling in 40 C.F.R. 260.43 (corresponding with 35 Ill. Adm. Code 720.143) in a way that incorporates elements that are already factors underlying the exclusion. Discussion of the amendments to that definition appears below.

Reclaimed by a Process Other than the Process That Generated the HSM. Five criteria are now used to determine whether a partially reclaimed HSM is commodity-like. The first criterion formerly weighed the degree of processing the HSM had already received against the degree of processing remaining before reclamation is complete. USEPA significantly revised the criterion so that it now gauges whether the degree of processing the partially reclaimed HSM is "substantial as demonstrated by using a partial reclamation process other than the process that generated the hazardous waste." 40 C.F.R. 260.31(c)(1) (2105), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.131(c)(1)).

The Board made two revisions in this criterion. First, the Board views all that follows the word "substantial" as a parenthetical that describes or defines that word for this context. Second, the Board changed "hazardous waste" to "hazardous secondary material" because the material could not be hazardous waste if deemed not a solid waste by the administrative determination.

The Board sees two potential problems with this criterion. One problem is in the wording of the first criterion, and the second is in USEPA's *Federal Register* discussion of the criterion. These potential problems force the inference that USEPA has significantly limited this criterion and shifted its former balancing function onto other criteria.

USEPA worded the criterion in positive terms, but the meaning is best understood in negative terms. Formerly, this criterion balanced the degree of processing in partial reclamation against the degree of processing needed to complete the reclamation. USEPA replaced that balancing with a determinative statement: "the partial reclamation . . . is substantial as demonstrated by using a partial reclamation process other than the process that generated the [HSM]." 40 C.F.R. 260.31(c)(1) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015). Thus stated, and in the light of USEPA's *Federal Register* discussion of this criterion, it is possible to maintain that partial reclamation in a process other than the process that generated the HSM makes the partial reclamation substantial.

USEPA explained as follows in the *Federal Register* notice:

> The first criterion in 40 CFR 260.31(c)(1) asks whether the degree of partial reclamation the material has undergone is substantial as demonstrated by

> using a partial reclamation process other than the process that generated the hazardous waste. By using a partial reclamation process other than the process that generated the hazardous waste, the more likely that the material will be commodity-like. Changes from the original language of the criterion include (1) replacing the general word "processing" with the words "partial reclamation"; and (2) removing from the criterion ambiguity that could lead a regulatory authority to apply the variance after the initial partial reclamation process when a commodity-like material is not produced until completion of further reclamation. 80 Fed. Reg. at 1734.

The Board does not believe that USEPA intends that partial reclamation of HSM in a process other than that which generated it makes the partial reclamation substantial. The Board believes that partial reclamation in processes other than the process that generated the HSM can be *not* substantial.

The Board interprets this criterion in the reverse of the way stated: partial reclamation in the process that generated the HSM is determinative that the reclamation is *not* substantial. Thus, partial reclamation in the process that generated the HSM would force a conclusion that the partially reclaimed HSM is not commodity-like and end further inquiry.[70] The fact of partial reclamation by a process other than the process that generated the HSM would allow further evaluation of the other criteria to determine whether the partially reclaimed material is commodity-like. The Agency agrees on this point. PC 14 at p. 5.

Other Criteria to Determine Partially Reclaimed HSM Commodity-Like. The above-quoted segment of *Federal Register* discussion makes it appear that USEPA intended that the exclusion would not apply until after the final reclamation process is complete. The discussion appears to indicate that the HSM does not become commodity-like until all steps of reclamation processes have been completed. This is contrary to USEPA's assertion that the exclusion applies "only after partial reclamation has produced a commodity-like material." 80 Fed. Reg. at 1734. The former language made it clear that the product of the partial reclamation was commodity-like, under the assumption that a material handled like a commodity will be managed in a way that minimizes losses. *See* 50 Fed. Reg. 614, 641 (Jan. 4, 1985).

The Board believes that USEPA did not intend to shift the determination away from the point that the partial reclamation has made the HSM a commodity-like character. The Board believes that each of the five criteria has a preclusive effect like the first criterion discussed above.

The second criterion determines whether the partially reclaimed HSM has sufficient economic value that it will be purchased for further reclamation. USEPA stated that economic value after further processing cannot justify exclusion, and also states that economic value after the cost of transportation is considered. *See* 80 Fed. Reg. at 1734. Lacking present economic value would preclude exclusion of the partially reclaimed HSM.

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[70] USEPA said that the revisions clarify that the partial reclamation must meet all five criteria. 80 Fed. Reg. at 1733.

The third criterion is whether the partially reclaimed HSM will be used as a viable substitute for a product or intermediate produced from virgin or raw materials. This requirement replaces the former consideration whether the partially reclaimed HSM is like an analogous raw material. USEPA intends that the determination be based on comparison of physical and chemical characteristics of the partially reclaimed HSM *vis-à-vis* the products or intermediates produced from virgin or raw materials. *Id.* While this would appear a determination that the partially reclaimed HSM is like an analogous raw material, the revisions shift the determination to whether the partially reclaimed HSM *will be used*. Thus, a determination that partially reclaimed HSM will not be used or may not be used would preclude exclusion.

The fourth criterion determines that there is a market for the partially reclaimed HSM, as demonstrated by existing customers who further reclaim the partially reclaimed HSM.[71] USEPA added the phrase "as determined by known customer(s) who are further reclaiming the material." 40 C.F.R. 260.31(c)(4) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015). USEPA stated that a market for further-reclaimed HSM cannot justify exclusion. *Id.* at 1735. Reading the revisions to this fourth criterion similarly to the revisions to the first criterion, that there is no present market for the partially reclaimed HSM would preclude exclusion of the material.

The fifth and final criterion is whether the partially reclaimed HSM is handled in a way that minimizes loss. Formerly, this criterion gauged "the extent to which the reclaimed material is handled to minimize loss." 40 C.F.R. 260.31(c)(5) (2015). USEPA replaced the comparative "the extent to which" with the more determinative "whether." This strengthens the point that failure to handle the partially reclaimed HSM in a way that minimizes loss would preclude exclusion.

JCAR Query re Adding a Definition of "Intermediate," Docketed as PC 12. The amendments add the phrase "product or intermediate" in the administrative exclusion for partially reclaimed HSM in 35 Ill. Adm. Code 720.131(c)(3) (corresponding with 40 C.F.R 260.31(c)(3)). The amendments also add the phrase to the legitimate recycling provision in 35 Ill. Adm. Code 720.143(a)(1) and (a)(1)(A) (corresponding with 40 C.F.R. 260.43(a)(1) and (a)(1)(A)). JCAR asked whether the Board could add a definition of the term "intermediate" to the rules. The Board declined to add the definition, as is explained in the discussion of legitimate recycling below in this opinion.

Revisions to Non-Waste Determinations. USEPA made minor revisions to the provisions for non-waste determinations. A non-waste determination deems that HSM is not discarded. The HSM is therefore to be determined excluded from the definition of solid waste. 40 C.F.R. 260.34(a) (corresponding with 35 Ill. Adm. Code 720.134(a)). There are two types of non-waste determination: (1) one for HSM that is reclaimed in a continuous industrial process, upon administrative determination that the HSM is part of the process and not discarded (40 C.F.R. 260.34(b) (corresponding with 35 Ill. Adm. Code 720.134(b))); and (2) one for HSM that is indistinguishable in all relevant aspects from a product or intermediate, upon administrative

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[71] USEPA revised the language that formerly required a "guaranteed market," allowing for market vagaries. 80 Fed. Reg. at 1734; *see* 40 C.F.R. 260.31(c)(4) (2015).

determination that the HSM is comparable to a product or intermediate and not discarded (40 C.F.R. 260.34(c) (corresponding with 35 Ill. Adm. Code 720.134(c))).[72]

USEPA now requires that the petitioner demonstrate the need for the exclusion. The petitioner must show that the HSM cannot meet or should not have to meet the conditions for an exclusion codified in 40 C.F.R. 261.2 or 261.4 (corresponding with 35 Ill. Adm. Code 721.102 or 721.104). *See* 40 C.F.R. 260.34(b)(4) & (c)(5) (2015), as amended at 80 Fed. Reg. 1694 (corresponding with 35 Ill. Adm. Code 721.134(b)(4) & (c)(5)).

USEPA added the non-waste determination with the 2008 DSWR amendments. *See* 73 Fed. Reg. 64668 (Oct. 30, 2008). USEPA cited administrative economy and a need to inform states why a facility cannot meet an existing exclusion as the reasons for adding this criterion. *See* 80 Fed. Reg. at 1735.

The Board has incorporated the revisions to the HSM exclusion by administrative non-waste determination into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal exclusion. All deviations from the federal text are listed in Table 3 below in this opinion. The following paragraphs outline the changes that USEPA has made. The Board adds explanation of the few ambiguities that the Board perceives in the federal language where appropriate in the following segments of discussion.

The Board retained the Board note appended to 35 Ill. Adm. Code 720.134. The Board added the note with the 2008 DSWR amendments to explain that USEPA intended the non-waste determination as an alternative to the generator and reclaimer determining the legitimacy of reclamation under one of the then-codified exclusions. At that time, these were the exclusions codified as 40 C.F.R. 261.2(a)(2)(ii) or 261.4(a)(23), (a)(24), or (a)(25) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B) or 721.104(a)(23), (a)(24), or (a)(25)).

As a result of the 2015 DSWR amendments, USEPA has removed the exclusions of 40 C.F.R. 261.2(a)(2)(ii) and 261.4(a)(25) and added the exclusion of 40 C.F.R. 261.2(a)(2)(ii) and 261.4(a)(27) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B) and 721.104(a)(25) and (a)(27)). Although USEPA revised the exclusion of 40 C.F.R. 261.4(a)(24) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)) to require an administrative determination relative to the nature of the intermediate and reclamation facilities managing the HSM, the determination of legitimacy still resides in the generator and owners and operators of facilities managing the HSM. The Board has revised the Board note to refer to the exclusions of 35 Ill. Adm. Code 721.104(a)(23), (a)(24), or (a)(27) (corresponding with 40 C.F.R. 261.4(a)(23), (a)(24), or (a)(27)).

The Board added the criterion pertaining to applicability and availability of a codified exclusion to each type of non-waste determination without substantive deviation from the federal

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[72] This appears similar to the exclusion for partially reclaimed HSM, but the criteria for determination differ. *Compare* 40 C.F.R. 260.34(c) (corresponding with 35 Ill. Adm. Code 720.134(c)) *with* 40 C.F.R. 260.31(c) (corresponding with 35 Ill. Adm. Code 720.131(c)).

text. The changes in cross-references and the revisions to the Board note are described in the appropriate entries in Table 3 below.

Revised Procedures for Administrative Determinations. USEPA revised the procedures for administrative determinations in ways that affect the several types of administrative determinations: solid waste determinations,[73] including the revised exclusion for partially reclaimed HSM[74] and new verified intermediate/reclamation facility determination for the second-party reclamation exclusion[75]; boiler determinations[76]; and non-waste determinations.[77] The provisions for two types of solid waste determinations[78] and boiler determinations (40 C.F.R. 260.32 (corresponding with 35 Ill. Adm. Code 720.132)) are not otherwise affected by the 2015 DSWR amendments.

The Board has incorporated the revisions to the procedures for administrative determinations into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal exclusion. All deviations from the federal text are listed in Table 3 below in this opinion. The following paragraphs outline the changes that USEPA has made. The Board adds explanation of the more significant deviations from the federal language where appropriate in the following segments of discussion.

Changed Circumstances. USEPA's first revision to the procedures is a softening of the effects of changed circumstances. Formerly, the procedure required reapplication for the "variance"[79] (*i.e.*, the solid waste determination, verified facility determination, boiler determination, or non-waste determination) when a change in circumstances affects how the HSM meets the criteria under which the variance was granted. 40 C.F.R. 260.33(c) (2015) (corresponding with 35 Ill. Adm. Code 720.133(c)). USEPA revised this to require the person holding the variance to send a description of the change in circumstances to the Regional Administrator for a determination whether the HSM continues to meet the relevant criteria. If the Regional Administrator determines that the HSM does not meet the criteria for the variance

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[73] 40 C.F.R. 260.31 (corresponding with 35 Ill. Adm. Code 720.131).

[74] 40 C.F.R. 260.31(c) (corresponding with 35 Ill. Adm. Code 720.131(c)).

[75] 40 C.F.R. 260.31(d) (corresponding with 35 Ill. Adm. Code 720.131(d)).

[76] 40 C.F.R. 260.32 (corresponding with 35 Ill. Adm. Code 720.132).

[77] 40 C.F.R. 260.34 (corresponding with 35 Ill. Adm. Code 720.134).

[78] A determination that HSM accumulated speculatively is not solid waste because sufficient quantities will be recycled the following year and a determination that HSM that is reclaimed then reused in the original production process where the reclamation is an essential part of the production process. *See* 40 C.F.R. 260.31(a) and (b) (corresponding with 35 Ill. Adm. Code 720.131(a) and (b).

[79] *See supra* note 36 and accompanying text.

based on the changed circumstances, the person holding the variance must re-apply for the non-waste determination.

Differences in Illinois law and the Illinois regulatory scheme have required the Board to avoid revising this provision in the way USEPA drafted this requirement. The Board generally requires a new petition to modify an adjusted standard. For this reason, the existing text of 35 Ill. Adm. Code 720.133(c) requires formal re-application to the Board. This requires filing a new petition for adjusted standard. *See* 35 Ill. Adm. Code 720.133 preamble & (a). As revised by USEPA, the rule now provides for an informal preliminary determination whether the changed circumstances necessitate reapplication for full review of the determination. This provision for informal preliminary determination is problematic for the Board. The Board has no mechanism or authority for making informal preliminary determinations. *See* 415 ILCS 5/27, 28 & 28.1 (2014).

For this reason, the Board has retained the existing requirement for petition to the Board for an adjusted standard. The Board has revised 35 Ill. Adm. Code 720.133(c), however, to incorporate elements of the revised language of corresponding 40 C.F.R. 260.33(c). The Board has further divided the provision into two subsections. Subsection (c)(1) states the requirement for a petition that includes a description of the changed circumstances. Subsection (c)(2) describes the Board determination that will result from the petition.

A possible alternative format might allow a preliminary determination as contemplated by USEPA, but the Board has not used that alternative. It is possible that the Board could sub-divide this provision into a two-step procedure. First, the Board could require the holder of the adjusted standard to send the description of changed circumstances to the Agency for preliminary determination whether the HSM continues to fulfill the criteria on which the adjusted standard was granted. If the Agency determines that the HSM does not fulfill the criteria, the Agency would notify the holder of the adjusted standard of that determination. Upon receipt of the Agency notification, the holder would re-apply for the adjusted standard. *See* 35 Ill. Adm. Code 720.133(c)(3).

The Board believes that this alternative format would be cumbersome. This alternative would negate any gains in administrative efficiency that USEPA sought to gain from it. *See* 80 Fed. Reg. at 1733.

The Agency (PC 14) commented that review is necessary to determine whether the excluded reclamation activity is "now outside of the previously issued determination." Thus, the Agency maintains that determination of changed circumstances requires review before reopening an adjusted standard that embodies an existing solid waste determination, verified facility determination, boiler determination, or non-waste determination on the basis of changed circumstances.

The Agency believes that the rule could require the holder of the adjusted standard to submit a description of the changed circumstances to the Agency for a preliminary determination whether the HSM continues to fulfill the criteria upon which the Board granted the adjusted standard. The Agency continues that obtaining an Agency preliminary determination should be

optional, not mandatory, so that a holder of an adjusted standard who believes changes circumstances exist could directly petition the Board to reopen the adjusted standard.

The Board observes that the holder of an adjusted standard is free to approach the Agency to obtain an opinion without authorization by Board rule. In fact, the Board strongly encourages all regulated entities to communicate liberally with the Agency and request Agency input as issues arise. A problem, however, is that the Board cannot make an Agency opinion bind the Board in a subsequent proceeding.

The Board believes that the holder of an adjusted standard who suspects that changed circumstances exist can evaluate the situation. The risk of wrongly evaluating the circumstances is exposure to enforcement action. Where the holder wishes administrative input to the evaluation to minimize the risk, the holder is free to seek an opinion from the Agency. By its comments, the Agency has volunteered to give assistance. Where the question of changed circumstances is close, or the holder of the adjusted standards wants to optimally reduce the risk of enforcement action, the holder should file a petition for adjusted standard for Board review.

The Agency further requests that the Board clarify when operations under an adjusted standard must cease due to changed circumstances. USEPA has not provided guidance in this regard, unlike the provision that allows continued operation under an expired "variance" where timely application for renewal has been filed. *Compare* 40 C.F.R. 260.33(d) (corresponding with 35 Ill. Adm. Code 720.133(d) *with* 40 C.F.R. 260.33(c) (corresponding with 35 Ill. Adm. Code 720.133(c)).

The only immediate guidance the Board can offer is that operation under an adjusted standard can continue as long as the adjusted standard remains effective, the operation occurs within the terms and conditions of the adjusted standard, and the Board has not issued an order prohibiting operation under the adjusted standard. If changed circumstances are not sufficient to cause operation to violate the terms and conditions of an adjusted standard, operation can continue until either the adjusted standard expires or the Board issues an order prohibiting continued operation under the adjusted standard.

In stating the foregoing, the Board is mindful that changed circumstances may arise on the effective date of the present amendments. The Board agrees with the Agency's observation that changed circumstances "would be the result of factors of the recycling process, the value of the hazardous secondary material, and contractual arrangements that tend to change and evolve over time." PC 14 at p. 8. The Board believes also that changed circumstances could arise suddenly, such as by equipment failure, accident or other mishap, etc. But the Board further believes that changed circumstances can arise through a change in the regulatory context, such as a change of law or rule.

We are faced with two changes in the regulatory context. The first is the advent of a 10-year maximum term for a solid waste, verified facility, boiler, or non-waste determination with these amendments may constitute "changed circumstances," as contemplated by USEPA. *See* 35 Ill. Adm. Code 720.133(d). The second is revisions to the legitimacy determination and its application could also constitute "changed circumstances." *See* 35 Ill. Adm. Code 720.143; *see also* 35 Ill. Adm. Code 720.131(c) and (d)(1), 720.134(b) and (c), 721.102(g), and

721.104(a)(23)(B)(v) and (a)(24)(D) (requiring application of the legitimacy determination). Consideration of the maximum fixed term and legitimacy determination appears in the following segments of discussion. Even if these are not changed circumstances, the Board believes it likely that USEPA intends that these amended requirements apply to existing solid waste, verified facility, boiler, and non-waste determinations. *See* PC 14 at pp. 6-7.

The Board will ensure that any new or revised adjusted standard includes a maximum term that complies with subsection (d), the subject of the following discussion. This means that the Board will issue a new adjusted standard, and not deny granting a new adjusted standard on the basis that it is not necessary, if the previously granted adjusted standard does not include a provision stating a compliant maximum term for the adjusted standard.

Fixed Term for Solid Waste, Verified Facility, Boiler, and Non-Waste Determinations. USEPA formerly did not impose a term limit on "variances" (solid waste determinations) and non-waste determinations. By the 2015 DSWR amendments, a solid waste, verified facility, boiler, or non-waste determination is now subject to a maximum term limit of 10 years. A facility owner or operator must re-apply for the solid waste, verified facility, boiler, or non-waste determination before expiration. If re-application occurs no later than six months prior to the expiration, the facility may continue to operate on the expired solid waste, verified facility, boiler, or non-waste determination until final disposition of the re-application. *See* 40 C.F.R. 260.33(d) (corresponding with 35 Ill. Adm. Code 720.133(d)).

As for all administrative determinations discussed here, solid waste, verified facility, boiler, and non-waste determinations are made by adjusted standard in Illinois. Re-application for an adjusted standard occurs by a new petition. Thus, the Board altered the language of the federal provision to reflect differences between the federal and Illinois regulatory schemes.

Notification of a Grant of a Solid Waste or a Non-Waste Determination. When a facility owner or operator is granted a solid waste or non-waste determination,[80] the federal rules now require notification of waste activity. The notification, made using a USEPA Notification of RCRA Subtitle C Activity form, is required before operation. The notification is also required before managing HSM under one of the codified exclusions affected by the 2015 DSWR amendments. 40 C.F.R. 260.42(a) (2015), as amended at 80 Fed. Reg. 1694. The facility owner or operator that has submitted notice of activity must submit a new notice when cessation of management of HSM for more than one year is anticipated. 40 C.F.R. 260.42(a) (2015), as amended at 80 Fed. Reg. 1694.

The 2008 DSWR amendments added the notification requirements, applicable to operating under one of the added reclamation-related exclusions from definition of solid waste. *See* 73 Fed. Reg. 64668 (Oct. 30, 2008). The 2015 DSWR amendments made clarifying and conforming amendments to the notice provision and expressly made compliance necessary for a facility that receives a solid waste, verified facility, boiler, or non-waste determination. *See* 80 Fed. Reg. 1694 (Jan. 13, 2015).

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[80] For the reasons outlined in note **Error! Bookmark not defined.** above, the Board is uncertain of the applicability of this provision to a boiler determination.

Applicability of the Revised Procedures to Existing Solid Waste, Boiler, or Non-Waste Determinations. The revised procedures apply to solid waste determinations, boiler determinations, and non-waste determinations. The procedural changes are those in 40 C.F.R. 260.33(c) and (d) (corresponding with 35 Ill. Adm. Code 720.133(c) and (d)), which require (1) submitting a description of changed circumstances that could affect application of the factors for issuance of the solid waste, boiler, or non-waste determination; (2) impose a maximum 10-year term for these determinations; and (3) submission of notification of RCRA Subtitle C waste activity.

The references to 40 C.F.R. 260.31, 260.32, and 260.34 (corresponding with 35 Ill. Adm. Code 720.131, 720.132, and 720. 134) in 40 C.F.R. 260.33(a) and (c) (corresponding with 35 Ill. Adm. Code 270.131(a) and (c)) embrace all forms of solid waste, boiler, and non-waste determinations. This is true even though USEPA has not otherwise revised all types of solid waste determinations, not revised boiler determinations at all, and the revisions to non-waste determinations were minor. In fact, the changed circumstances provision of 40 C.F.R. 260.33(c) formerly applied only to non-waste determinations. The 2015 DSWR amendments added express references to solid waste and boiler determinations.

The references to 40 C.F.R. 260.31, 260.32, and 260.34 in 40 C.F.R. 260.33(a) and (c) do not include 40 C.F.R. 260.21, 260.22, or 260.23 (corresponding with 35 Ill. Adm. Code 720.121, 720.122, and 720. 123). Thus, the revised procedures do not apply to approval of alternative equivalent testing methods, hazardous waste delisting, or petition for regulation as universal waste.

Requirement for Legitimate Recycling

Since inception of the RCRA Subtitle C regulations, USEPA has ever required that any use or reuse of hazardous waste must be "legitimate," and not "sham recycling."[81] USEPA, however, did not codify a definition of "legitimate recycling" until the 2008 DSWR amendments.[82] The 2015 DSWR amendments have revised the definition of "legitimate recycling." *See* 40 C.F.R. 260.43, as amended at 80 Fed. Reg. 1694, 1736 (Jan. 13, 2015). The 2015 DSWR amendments have further added a definition of and prohibition against "sham recycling." *See* 40 C.F.R. 261.2(b)(4) & (g), as added at 80 Fed. Reg. 1694, 1736 (Jan. 13, 2015).

The policy that requires legitimate recycling has always weighed four factors to determine legitimacy. USEPA summarized those factors as follows:

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[81] 80 Fed. Reg. 1694, 1719-20 (Jan. 13, 2015); *see* 45 Fed. Reg. 33084, 33093 (May 19, 1980) (initial adoption of 40 C.F.R. 261, temporarily deferring regulation of hazardous waste recycling that is legitimate); *see also* 50 Fed. Reg. 614 (Jan. 4, 1985) (adding regulations for recycling).

[82] *See* 73 Fed. Reg. 64668, 64700-10 (Oct. 30, 2008) (noting prior reliance on a 1989 policy directive).

> • Factor 1: Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product or intermediate of the recycling process.
>
> • Factor 2: The recycling process must produce a valuable product or intermediate.
>
> • Factor 3: The generator and the recycler must manage the hazardous secondary material as a valuable commodity when it is under their control.
>
> • Factor 4: The product of the recycling process must be comparable to a legitimate product or intermediate.
>
> 80 Fed. Reg. at 1719-20; *see* 73 Fed. Reg. at 64701 (brief narrative description of the four factors).

USEPA said that these four factors are a simplification and clarification of old policy statements, but these factors are substantively the same as the legitimacy policy outlined in those policy statements. 80 Fed. Reg. at 1720.

Table B at the end of this discussion of the DSWR amendments compares the 2008 and 2015 versions of the definition of "legitimate recycling." Comparative examination of the two versions reveals that USEPA has reworded and reorganized the material. The substance of the four factors appears unchanged, even if the focus of consideration under some may have shifted. The following are the more substantive revisions that comparison reveals.

Expanded Applicability to All Recycling-Based Exclusions. USEPA removed the references to the exclusions added by the 2008 DSWR amendments. The references formerly appeared in the section heading and the introductory statement of 40 C.F.R. 260.43(a). They included the exclusion by administrative non-waste determination of 40 C.F.R. 260.34 (corresponding with 35 Ill. Adm. Code 720.134), the codified generator-reclaimed HSM exclusions of 40 C.F.R. 261.2(a)(2)(ii) and 261.4(a)(23) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B) and 721.104(a)(23)), and the second-party reclamation exclusions of 40 C.F.R. 261.4(a)(24) and (a)(25) (corresponding with 35 Ill. Adm. Code 721.104(a)(24) and (a)(25)).

USEPA explained that the legitimacy test now applies to all recycling of HSM.[83] 80 Fed. Reg. at 1720. The amended definition of "legitimate recycling" provides as follows: "Recycling of hazardous secondary materials for the purpose of the exclusions or exemptions from the hazardous waste regulations must be legitimate." 40 C.F.R. 260.43(a) (2015), as amended at 80

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[83] The legitimacy of recycling activity is relevant only in the context of an exclusion from the definition of solid waste or hazardous waste. The hazardous waste rules currently provide 20 codified recycling-based exclusions from the definition of solid waste. *See* 40 C.F.R. 261.2(e)(1) & 261.4(a)(6)-(a)(14), (a)(16)-(a)(24), (a)(26) & (a)(27) (corresponding with 35 Ill. Adm. Code 721.102(e)(1) & 721.104(a)(6)-(a)(14), (a)(16)-(a)(24), (a)(26) & (a)(27)). The rules further provide about six exclusions available by administrative determination. *See* 40 C.F.R. 260.30 (corresponding with 35 Ill. Adm. Code 720.130).

Fed. Reg. 1964 (Jan. 13, 2015). It is possible that the scope of the requirement for legitimate recycling extends beyond exclusion from the definition of solid waste to exclusion from the definition of hazardous waste. The definition of "hazardous secondary material" added by the 2008 DSWR amendments is broad enough to embrace excluded hazardous waste also.[84] *See* 40 C.F.R. 260.10 (2015) (corresponding with 35 Ill. Adm. Code 720.110).

Fulfilling All Four of the Legitimacy Factors Is Required. USEPA made several changes that make fulfilling all four of the legitimacy factors necessary. First, all four factors for consideration are now presented in a coordinate format. The third and fourth factors are no longer codified separately from the first and second. The third and fourth factors are no longer called "other factors for consideration." USEPA also removed the former statement that a determination of legitimacy was possible even where factors 3 and/or 4 were not met. *Compare* 40 C.F.R. 260.43(b)(1), (b)(2), (c)(1) & (c)(2) (2015) *with* 40 C.F.R. 260.43 (a)(1), (a)(2), (a)(3) & (a)(4) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015).

Further, changes in language now phrase each factor in more clearly mandatory terms. For example, USEPA removed the elements of the second factor from the recitation of the first factor, and stated the first factor in mandatory terms. *Compare* 40 C.F.R. 260.43(b)(1) & (b)(2) (2015) *with* 40 C.F.R. 260.43(a)(1) & (a)(2) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015). USEPA also replaced each of three former appearances of "should" in the third factor. *Compare* 40 C.F.R. 260.43(c)(1) (2015) *with* 40 C.F.R. 260.43(a)(3) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015). Finally, USEPA shifted from requiring consideration of the third and fourth factor to imposing requirements on the HSM and management of the HSM. *Compare* 40 C.F.R. 260.43(c) (2015) *with* 40 C.F.R. 260.43(a)(3) & (a)(4) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015).

USEPA Added Flexibility in Fulfilling Factors 3 and 4. USEPA added flexibility to factors 3 and 4. The revisions will allow determinations of legitimacy in instances where the hazardous constituent content and any hazardous characteristics of the HSM or the product of recycling would have not fulfilled factor 3 or factor 4.[85]

The focus of factor 3 is the hazardous constituent content and any hazardous characteristics of the HSM undergoing recycling. The HSM is compared to any analogous raw material. HSM Factor 3 formerly required that the HSM have hazardous characteristics comparable to those of the raw material for which it substitutes. *See* 40 C.F.R. 260.43(c)(2) (2015). It is now possible to fulfill factor 3 by managing the HSM "in a manner consistent with the management of the raw material or in an equally protective manner." 40 C.F.R. 260.43(a)(3) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015).

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[84] The regulations also provide three recycling-based exclusions from the definition of hazardous waste. *See* 40 C.F.R. 261.4(b)(2), (b)(12) & (b)(14) (corresponding with 35 Ill. Adm. Code 721.104(b)(2), (b)(12) & (b)(14)).

[85] As briefly noted above, USEPA removed the former statement that fulfilling factors 3 and 4 was not necessary to a determination of legitimacy. *See* 40 C.F.R. 260.43(c)(3) (2015). USEPA made fulfilling these factors necessary while adding flexibility for fulfilling them.

The focus of factor 4 is the hazardous constituent content and any hazardous characteristics of the product of recycling. The product of recycling is compared to analogous products. USEPA revised factor 4 to allow a determination of legitimacy even "[i]f the product of the recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate . . . ." Documentation and certification of facts[86] "which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk." 40 C.F.R. 260.43(a)(4)(iii) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.143(a)(4)(C)).

USEPA further revised factor 4 to allow a determination of legitimate recycling in two situations where there is no analogous product or intermediate. Legitimacy is possible where the product of recycling is a commodity that meets "widely recognized standards" for that commodity. Legitimacy is also possible where the HSM is recycled by being returned to the process that generated the HSM.[87] *See* 40 C.F.R. 260.43(a)(4)(ii) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.143(a)(4)(B)).

The Board has incorporated the revisions to the definition of "legitimate recycling" into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal definition. All deviations from the federal text are listed in Table 3 below in this opinion. The following paragraphs outline the changes that USEPA has made. No further explanation of any of the deviations from the federal language is necessary.

Suggested Substantive Changes Submitted to the Board. The Board received requests to substantively revise the text of the proposed rules as they provide for the legitimacy determination. JCAR made one such request, Dow made several, and IERG (PC 15) urged the Board to adopt Dow's suggestions.

The following paragraphs consider several of the suggested substantive revisions. The Board prefaces the several segments of discussion with two observations.

First, USEPA has wrestled with the balance between adequate protection of human health and the environment and encouraging resource conservation and recovery with the 2008 and 2015 DSWR amendments. *See, e.g.*, 80 Fed. Reg. 1694, 1295, 1732 (Jan. 13, 2015); 73 Fed. Reg. 64668, 64684 (Oct. 30, 2008). USEPA has sought to define the boundary between secondary material that is being reclaimed from that which is solid waste by the DSWR amendments. 80 Fed. Reg. at 1701, 73 Fed. Reg. at 64670.

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[86] "[B]ased on lack of exposure from toxics in the product, lack of the bioavailability of the toxics in the product, or other relevant considerations." 40 C.F.R. 260.43(a)(4)(iii) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.143(a)(4)(C)).

[87] There are similar exclusions for recycling into the generating process. *See, e.g.*, 40 C.F.R. 260.31(b); 261.2(e)(1)(iii) & 261.4(a)(8) & (a)(9) (corresponding with 35 Ill. Adm. Code 720.131(b); 721.102(e)(1)(C) & 721.104(a)(8) & (a)(9)).

Second, the Board cannot make any changes to the federal text that would risk changing the scope or meaning of the federal rules—*i.e.*, the balance struck by USEPA. The Board's role is limited to making the balance struck by USEPA fit within the Illinois regulatory scheme. Notwithstanding a few exceptions, the revisions that the Board can make are very limited:

> In adopting "identical in substance" regulations, the only changes that may be made by the Board to the federal regulations are those changes that are necessary for compliance with the Illinois Administrative Code, and *technical changes that in no way change the scope or meaning of any portion of the regulations* . . . . 415 ILCS 5/7.2(a) (2014) (emphasis added; exceptions irrelevant to this segment of discussion omitted).

The Board cannot make the commenters' suggested substantive revisions to the text because they risk changing the scope and meaning of the rules. The revisions requested seek clarification of USEPA's intent where that intent is not clear. Only USEPA can confer clarity on the rules under such circumstances.

Nevertheless, substantive revision of federally derived Illinois rules is possible by the general rulemaking procedure. The limitation is that any rules adopted by general rulemaking must be at least as stringent as and not inconsistent with corresponding federal requirements. 415 ILCS 5/22.4(b) (2014).

Adding a Definition of "Intermediate." The amendments add the phrase "product or intermediate" in the legitimate recycling provision in 35 Ill. Adm. Code 720.143(a)(1) and (a)(1)(A) (corresponding with 40 C.F.R. 260.43(a)(1) and (a)(1)(A)). USEPA also introduced the phrase to the administrative exclusion for partially reclaimed HSM in 35 Ill. Adm. Code 720.131(c)(3) (corresponding with 40 C.F.R 260.31(c)(3)), as is briefly mentioned in the discussion of that exclusion above.

JCAR (PC 12) asked whether the Board could add a definition of the term "intermediate." Alternatively, JCAR asked whether the Board would add a Board note to explain the meaning. Dow (PC 16) requested that the Board add a suggested definition:

> Intermediate—as used in 35 Ill. Adm. Code 720.130-143, Intermediate is a substance formed as a stage in the manufacture of a desired end-product. PC 16 at p. 2.

The Board declines to add either a definition of explanation by way of Board note appended to the text. The Board believes that the meaning of the term "intermediate" in this phrase is clear and unambiguous, and no further definition is necessary or appropriate. Board staff responded to JCAR's request as follows:

> The term "intermediate" is from the federal . . . phrase "product or intermediate" in the context of physical/chemical processes. Paired with the word "product," this use limits the meaning of "intermediate" to within the process or making the product. In the context of a process, this could only have the meaning of something between the raw materials and the final product.

> In chemistry, an intermediate is a material formed from the initial materials before the desired end product of a chemical process. Alternatively, an intermediate is a substance formed in the course of a chemical process that participates in the process until it is either deactivated or consumed to make the end product.

The Dow assertions (PC 16) do not convince the Board that there is any ambiguity in the meaning or that a definition is needed. Dow observed as follows:

> Intermediates generated in industry can be used immediately at the same location or later at the same or different locations via closed or open pipe to manufacture a desired product. These intermediates are not treated as solid waste nor are they considered the result of a recycling process. Rather, they are steps in the process and are not regulated by this rule. Therefore it's important to define this difference in the rule.

The Board sees problems with Dow's suggestion. First, adding a definition of "intermediate" will not add the requested clarity to the rules. The definition of "used or reused" in the hazardous waste rules makes it clear that the materials described by Dow are not "reclaimed" because no component is removed from the material. *Compare* 35 Ill. Adm. Code 721.102(c)(5) *with* 35 Ill. Adm. Code 721.102(c)(4). Second, the Dow-suggested definition does not address Dow's underlying concern that an intermediate would be considered "reclaimed." The Board cannot see any way that use of the term "intermediate" in the context of defining "legitimate recycling" could blur the distinction between "used or reused" and "reclaimed." Finally, the present purpose is to define whether reclamation falls within the exclusions from the definition of solid waste adopted by USEPA, not to define the "reclamation" itself.

The Board further observes that an attempt to define a phrase that is clearly understood in its context risks creating ambiguity where none would otherwise exist.

Adding Definitions of "Analogous Product" and "Analogous Raw Material." The phrase "analogous product"[88] appears in the definition of "legitimate recycling." *See* 35 Ill. Adm. Code 720.143(a)(4) (corresponding with 40 C.F.R. 260.43(a)(4)). The phrase "analogous raw material" also appears in the definition of "legitimate recycling" but also in the exclusion for off-site solvent reclamation. *See* 35 Ill. Adm. Code 720.143(a)(3) & 721.104(a)(24)(F)(iv) (corresponding with 40 C.F.R. 260.43(a)(3) & 261.4(a)(24)(vi)(D)).

Dow requests that the Board add definitions of the terms. The Board declines to do so. The terms have clear meaning without definitions, and the possibility of departing from USEPA's intent is an unnecessary risk that the Board wishes to avoid.

The plain dictionary meaning[89] of "analogous" is "Corresponding in some particular." Dictionary.com. *Dictionary.com Unabridged.* Random House, Inc. http://www.dictionary.com/

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[88] Once in the phrase "analogous product or intermediate."

[89] The Board does not believe that USEPA intends the narrower, specialized definition of the term used in chemistry, "Similar in chemical properties and differing in chemical structure only

browse/analogous (accessed June 9, 2016). Synonyms are "similar," "alike," "comparable," and "akin." *Id.* Dow asks the Board to add the following definitions:

> Analogous Product—a product made of raw materials or made by competing companies with similar specifications for which a hazardous secondary material substitutes.
>
> Analogous Raw Material—a material for which a hazardous secondary material substitutes and which serves the same function and has similar physical and chemical properties as the hazardous secondary material.

The Board sees problems with both definitions. First, there is nothing in the USEPA rules or *Federal Register* discussion that would add consideration of the source of analogous product or the materials out of which an analogous product is made. Second, USEPA uses the specifications or properties of a substitute only where there is no analogous product.[90] *See* 35 Ill. Adm. Code 720.143(a)(4)(ii)(A). While specifications and physical and chemical properties are important factors, using them to define "analogous product" or "analogous raw material" might be unduly limiting, or it could shift USEPA's intended meaning.

The Board believes that USEPA intended "analogous" to mean "corresponding in some particular" that is significant to use of the HSM in place of an analogous product or raw material. In fact, where consideration of specifications and properties fails to demonstrate that use of HSM is legitimate, USEPA allows a determination of legitimacy as follows:

> The recycling can be shown to be legitimate based on lack of exposure from toxics in the product, lack of the bioavailability of the toxics in the product, or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk. 35 Ill. Adm. Code 720.143(a)(4)(C).

Thus, the Board perceives that the focus shifts from function in an analogous product or intermediate, to properties where no analogous product exists, to the relative risks of using the HSM and the analogous product or raw material where the properties are dissimilar and no analogous product exists. Similarly, attention shifts to containment of HSM where there is no analogous raw material. 35 Ill. Adm. Code 720.143(a)(4)(A)(ii).

The off-site solvent reclamation exclusion includes a definition of the term "analogous raw material." That definition includes the element of similarity of physical and chemical properties, but also the element of identity of function, as follows:

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with respect to one element of group." analogous. Dictionary.com. *The American Heritage Science Dictionary.* Houghton Mifflin Company. http://www.dictionary.com/browse/analogous (accessed June 9, 2016).

[90] USEPA did introduce similarity of physical and chemical properties as an element of an analogous raw material for the purposes of the off-site solvent reclamation exclusion. *See* 35 Ill. Adm. Code 721.104(a)(24)(F)(iv).

> An "analogous raw material" is a raw material for which the hazardous secondary material substitutes and that serves the same function and has similar physical and chemical properties as the hazardous secondary material. 35 Ill. Adm. Code 721.104(a)(24)(F)(iv).

This definition is included in only one of the codified exclusions, so the definition likely does not apply to the determination of legitimacy in general for all exclusions.

Adding a Definition of "Widely-Recognized Commodity Standards and Specifications." The phrase "widely-recognized commodity standards and specifications" appears in language that would limit use to HSM with a comparable hazardous constituent content where an analogous product exists. *See* 35 Ill. Adm. Code 720.143(a)(4)(A)(ii) (corresponding with 40 C.F.R. 260.43(a)(4)(i)(B)). Dow proposes the following definition:

> Widely-recognized Commodity Standards and Specifications – includes those standards and specifications that are publicly available; e.g., in safety data sheets (SDSs), on-line vendor specifications, sales literature, and the like.

The Board declines to add the definition. While publicly available standards and specification may be widely recognized, it does not follow that widely recognized standards and specifications are necessarily publicly available. Linking between public availability and wide recognition is a step the Board cannot make without clear indication from USEPA.

Various Clarifications to the Rules. In addition to the requests discussed above or elsewhere in this opinion, Dow (PC 4) submitted numerous other clarifications to the definition of legitimate recycling and other segments of the DSWR amendments. IERG (PC 15) submitted comments in support of the Dow comments, but included one suggestion that was independent of the Dow comments. Having now thoroughly discussed the various reasons why the Board cannot add to the federal rules, the Board outlines the remaining requests in summary fashion. With regard to each Dow request, if clarity is required, USEPA will need to add it. Absent clarification by USEPA, the federal amendments and USEPA's discussion of those amendments must speak for themselves. Fact- or record-based determinations are beyond the scope of identical-in-substance rulemaking.

> PC 16 at p. 3: Add a Board note to the definition of legitimate recycling that states a presumption of legitimacy for the pre-2008 exclusions from definition as solid waste. Misunderstanding of the status of the pre-2008 exclusions could arise in the future.
>
> Board response: The federal rules do not state a presumption of legitimacy, only the conditions for each exclusion.
>
> PC 16 at pp. 3-8: Append a Board note to 35 Ill. Adm. Code 720.143(a)(4)(C)(ii) (alternative 2 of legitimacy factor 4) that (1) defines return to the original process as a single form of "closed loop recycling"; and (2) further explains that "return to the original process or processes" is not limited to the same production unit or on-site, reciting a series of five possible variables in what constitutes "return to the original process or

processes."[91] These revisions would reduce the documentation and testing required to establish legitimacy.

Board response: The federal rule that states the factor 4 considerations says only (1) that the product is a commodity that meets certain standards; or that the HSMs "being recycled are returned to the original process or processes from which they were generated to be reused (e.g., closed loop recycling)." 35 Ill. Adm. Code 720.143(a)(4)(C)(ii). First, "e.g.," indicates that example closed-loop recycling is non-limiting. Second, the Board is not in a position to make the substantive determination that the five variables put forward by Dow define the range of return to the original process or processes. For example, the recitation of an example establishes that reclamation as return to the original process or processes. The long-established nature of a reclamation process or some other suggested variable may not be determinative.

PC 16 at pp. 8-9: Append a Board note to 35 Ill. Adm. Code 721.101(c)(8) that clarifies that a unit of HSM remaining on-site for more than a year does not evince speculative accumulation, so long as 75% of the HSM on-site at the beginning of the previous year has been recycled or moved off-site for recycling.

Response: USEPA stated that the purpose for the new requirement requiring marking accumulation start dates on storage vessels was to allow quick determination of how long HSM has been in storage. 80 Fed. Reg. at 1741. Quick determination of accumulation start date "is a simple and effective way to provide useful information about likely compliance." 80 Fed. Reg. at 1749. An accumulation start date can demonstrate compliance where none of the vessels containing HSM is marked with a date earlier than the beginning of the previous year. Where the marking on any vessel of HSM indicates an accumulation start date earlier than the beginning of the previous year, determination of the amount received and the amount either recycled or sent off-site for recycling is necessary. It is clear on the face of the rule that compliance is determined by the portion of the material received that is recycled or sent off-site for recycling. Since compliance is determined based on the portion, the presence of vessels marked with a date earlier than the beginning of the previous year does not establish non-compliance. However, the presence of a significant portion of vessels bearing an earlier date would prompt further investigation.

PC 16 at pp. 9-10: Add Board notes to clarify that speculative accumulation does not apply to several exemptions or exclusions from definition as solid waste.[92]

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[91] The variables are (1) return to another process that generates the HSM; (2) return via a closed-loop or open-loop system; (3) return from on-site or off-site; (4) return from multiple cycle use of the HSM (or product or intermediate); or (5) return as part of long-established recycling of the HSM in the manufacture of a product or intermediate using the HSM. PC 16 at p. 5.

[92] Enumerated by Dow relative to definition as solid waste were 35 Ill. Adm. Code 721.102(c)(4) table & (e)(1)(C) (commercial chemical products and materials returned without reclamation to

Response: The term "speculative accumulation" (defined in 35 Ill. Adm. Code 721.101(c)(8) and 721.102(a)(2)(B)) is used to define fundamental terms in the solid waste and in the basic solid waste determination itself. *See* 35 Ill. Adm. Code 721.102(a)(2)(B), (c)(4) & (e)(2)(C). The term is also used as an express precondition to several codified exclusions from definition as solid waste.[93] *See* 35 Ill. Adm. Code 721.104(a)(6), (a)(7), (a)(12), (a)(17), (a)(18), (a)(19), (a)(20), (a)(22), (a)(23) & (a)(24); 721.139(a)(4) & (c) & 721.140. Applicability of the term and concept of "speculative accumulation" to the solid waste determination is provided by 35 Ill. Adm. Code 721.102. That determination is intricate and complex. Any effort to clarify applicability of "speculative accumulation" risks changing the federally required terms of the solid waste determination. This is further true of the various codified exclusions from definition as solid waste. Prohibition against speculative accumulation in one codified exclusion does not mean that speculative accumulation does not apply under another exclusion. In the present context, those aspects of the Dow comments that relate to definition as hazardous waste are inapposite.

PC 16 at p. 10: Add Board note clarification as to the circumstances under which an analogous product fulfills the first criterion of Factor 4 of the legitimacy determination. Dow asserts as follows:

> Analogous products or intermediates should include common products or intermediates found in wide-spread markets, which may be secondary markets; such markets typically are well-known, recognized, established, mature, and large. PC 16 at 10.

Response: The first criterion of Factor 4 would allow and affirmative determination where the product of the recycling process that uses HSM to not exhibit a hazardous characteristic which an analogous product does not exhibit, where an analogous product exists. *See* 35 Ill. Adm. Code 720.143(a)(4)(A)(i). Dow's suggested "clarification" would have the Board potentially limit the universe of analogous products. This request is a variation on the requests for definitions of the term "analogous product" and "widely-recognized commodity standards and specifications" discussed above.

PC 16 at p. 11: Add Board note clarification as to "what constitutes a valid comparison" under which an analogous product fulfills the second criterion of Factor 4 where "one

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the original process that generated them), 721.104(a)(8), (a)(14) & (a)(26) (HSM returned to and reclaimed in the original process, excluded scrap metal, and solvent wipes), 721.106(a)(3)(A)-(a)(3)(D) (industrial ethyl alcohol, scrap metal other than excluded scrap metal, and fuel and hazardous waste fuel produced from oil-bearing hazardous wastes). Dow further included solid wastes excluded from definition as hazardous waste in 35 Ill. Adm. Code 721.104(b)(3), (b)(12) & (b)(14) (mining burden returned to the mine site, used chlorofluorocarbon refrigerants that are reclaimed for further use, and used oil distillation bottoms used as feedstock to make asphalt products).

[93] The term "speculative accumulation" is used to define one listed hazardous waste. *See* 35 Ill. Adm. Code 721.132(a) (hazardous waste number K177).

company does not know whether another company produces an analogous product or intermediate made from virgin materials."

Response: The second criterion of Factor 4 would allow an affirmative determination where the concentrations of hazardous constituents contributed by the HSM in the product or intermediate are comparable to or lower than the concentrations found in analogous products or are at concentrations that meet widely recognized commodity standards and specifications. As with the immediately preceding suggestion, Dow's suggested "clarification" is a variation on the requests for definitions of the term "analogous product" and "widely-recognized commodity standards and specifications" discussed above.

PC 16 at pp. 11-15: Add Board note explanations relating to applicability of the documentation requirements of the definition of "legitimate recycling" to pre-2008 exclusions from the definition of solid waste.

Response: In the opinion accompanying the March 3, 2016 proposal for public comment, the Board discussed a number of open issues relating to the 2015 DSWR amendments. The Board repeats those discussions in following segments the present opinion. As has been repeated several times in the present discussion, the Board cannot add clarity to the rule without clear indication of USEPA's intent in particular regards. Where USEPA's intent is unclear, the Board can do nothing.

PC 16 at p. 15: Add Board note clarification that the verified facility requirements do not apply to pre-2008 exclusions.

Response: The verified facility determination applies exclusively to the off-site solvent reclamation exclusion. *See* 35 Ill. Adm. Code 720.131(d). The requirements for use of verified facilities for HSM management are unique to 35 Ill. Adm. Code 721.104(a)(24). This exclusion is independent of all remaining pre-2008 exclusions. No clarification is needed.

PC 16 at p. 16: Clarify that the "contained" requirement is not fulfilled due to one or more releases from a container.

Response: The 2015 DSWR amendments add a definition of "contained." *See* 35 Ill. Adm. Code 720.110. That definition determines compliance with the "contained" requirements of the legitimacy determination and various exclusions. *See* 35 Ill. Adm. Code 720.143(a)(3) & 721.104(a)(23)(B)(i), (a)(24)(E)(i), (a)(24)(F)(iv) & (a)(26)(A).

PC 16 at p. 16: Clarify that application of the T/S/D facility standards for tank systems (35 Ill. Adm. Code 724.Subpart J and 725. Subpart J) do not determine compliance with the requirement that HSM remain "contained."

Response: The definition of "contained" cited immediately above sets forth two options. "Containment situation 1" is non-hazardous waste containment. "Containment situation 2" is hazardous waste containment. Both apply to containment of HSM. Under

containment situation 2, compliance with T/S/D facility standards creates a presumption that a material is "contained." No clarification is needed.

PC 15 at p. 3: The Board's addition of the word "unpermitted" before "release" in the definition of "contained" could result in improper interpretation and misapplication of the "contained" standard.

Response: The Board does not intend that application of a federally derived standard have greater effect in Illinois have any greater effect than was intended by USEPA. Nevertheless, if an entity managing HSM, for whatever reason, has the written authority of the Agency or USEPA—*i.e.*, a "permit"—to release HSM from containment, the Board does not wish that release to preclude a conclusion that the HSM is "contained" for the purposes of the exclusions from the definition of solid waste.

PC 16 at p. 16: Change "other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk" in the language of the rule to "other relevant considerations which show that the product of the recycling process does not contain levels of hazardous constituents that pose a significant human health or environmental risk" to clarify that the assessment and documentation required under legitimacy Factor 4 refers to "the product made using recycled material and not from the recycled product."

Response: This option for affirmative determination under legitimacy Factor 4 applies where the HSM contributes higher levels of hazardous constituents than would appear in an analogous product or intermediate. *See* 35 Ill. Adm. Code 720.143(a)(4)(C). The focus of the assessment and documentation is on the risk to human health and the environment posed by "toxics in the product." *See* 35 Ill. Adm. Code 720.143(a)(4)(C)(ii). While the change in language suggested by Dow would parallel the usage in the rest of the text of Factor 4, the Board does not see enough distinction between "recycled product" and "product of the recycling process."

Supplemental observation 1 for USEPA review: The USEPA amendments to this provision shifted the language from "reclamation" to "recycling." *Compare* 40 C.F.R. 260.43 (2014) *with* 40 C.F.R. 260.43 (2015), as amended at 80 Fed. Reg. 1694, 1773 (Jan. 13, 2015). As observed in previous segments of discussion, "recycling" embraces "use or reuse" and "reclamation." *See* 35 Ill. Adm. Code 721.101(c)(7). The general distinction between "reclamation" and "use or reuse" is whether constituents of the HSM are extracted as separate end products. But even this distinction becomes a bit murky.[94] *See* 35 Ill. Adm. Code 721.101(c)(4) and (c)(5). The term "recycled product" would appear to focus on the primary product of a reclamation process. The term "product of the recycling process" would appear to embrace residues or byproducts of the process.

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[94] "Regeneration," as used in the definition of "reclaimed" could occur by a process that generates no residue or separate product, and "use as an effective substitute" could generate a residue. Further, it is not entirely clear that a waste residue is a "separate end product." *See* 35 Ill. Adm. Code 721.101(c)(4) and (c)(5).

Further, subtleties in the language of the various segments of the legitimacy determination could be interpreted as shifting the meaning between "reclamation" and "use or reuse." *Compare* 40 C.F.R. 261.1(c)(4), (c)(5), and (c)(7) (2015), as amended at 80 Fed. Reg. at 1773 *with* 40 C.F.R. 260.43 (2015), as amended at 80 Fed. Reg. at 1773.

Supplemental observation 2 for USEPA review: The definition of legitimate recycling uses language that varies. The word "valuable" when used relative to a product or intermediate in 40 C.F.R. 260.43(a)(2) would appear equivalent to "legitimate" used in the same way in 40 C.F.R. 260.43(a)(4), (a)(4)(i), (a)(4)(ii), and (a)(4)(iii).

PC 16 at pp. 17-18: Clarify the level of documentation required for an affirmative determination under legitimacy Factor 4.

Response: USEPA will need to provide an answer more precise that the following or to add any description within the text of the rule: The level of documentation required would be that which a person of reasonable prudence and business judgment could reasonably rely on to conclude that Factor 4 is fulfilled.

PC 16 at pp. 18-19: Clarify what would be within the scope of "widely-recognized commodity standards and specifications.

Response: See the above discussion of the requested definition of this term.

PC 16 at p. 19: Clarify that reordering of the steps of legitimacy Factor 4 is possible.

Response: The text of Factor 4 outlines a succession of analysis. Following the analysis in reverse clarifies that USEPA intends a sequence for analysis. (3) The assessment and documentation occurs only where "the product of the recycling process has levels of hazardous constituents that are not comparable to a legitimate product or intermediate as provided in subsection (a)(4)(A) or (a)(4)(B)." 35 Ill. Adm. Code 720.143(a)(4)(C). (2) Whether the product of recycling is "a commodity that meets widely recognized standards and specifications" or the HSM is returned to the process that generated them is relevant only "[w]here there is no analogous product." 35 Ill. Adm. Code 720.143(a)(4)(B). (1) Whether the product of recycling is comparable to a legitimate product or intermediate (based on comparison of relative contents of hazardous constituents) occurs only if there is an analogous product or intermediate. 35 Ill. Adm. Code 720.143(a)(4)(B). Assuming any other sequence to the analysis than subsection (a)(4)(A), then (a)(4)(B), then (a)(4)(C) would ignore the plain meaning of the text of the rule.

PC 16 at p. 19: Clarify when analysis under legitimacy Factor 4 is complete. Once the requirements of one subsection of legitimacy Factor 4 is satisfied, "the requirements of any other of these subparagraphs are also met."

Response: As is explained in the immediately foregoing response, the analysis proceeds in a sequential order, and a succeeding inquiry only applies after the preceding inquiry produces a negative result.

PC 16 at p. 20: Clarify the meaning of "pre-2008 exclusions."

Response: Giving the term "pre-2008 exclusions" its plain meaning, all exclusions from definition as hazardous waste would embrace those exclusions that existed before USEPA adopted the 2008 DSWR amendments. These would necessarily include all of the (still existing) exclusions in 40 C.F.R. 261.4(a)(1) through (a)(22). The Board, however, would interpret the term within the function for its use to include all exclusions that are independent of the 2008 and 2015 DSWR amendments. This would add the exclusion in 40 C.F.R. 261.4(a)(26).

PC 16 at p. 20: Dow supports elimination of "land based units" from the exclusion for HSM reclaimed under the control of the generator.

Response: The Board has no option in the context of in identical-in-substance proceeding other than to adopt the substance of the federal amendments.

Applicability of the 2015 DSWR Amendments to Existing Exclusions

The foregoing segments of discussion that pertain to applicability of the various new and modified exclusions from the definition of solid waste and procedural requirements related to future applicability.[95] Applicability of the revised rules to existing exclusions and administrative determinations is another issue. USEPA outlined specific elements of the 2015 DSWR amendments that supersede prior exclusions and administrative determinations. Whether new requirements supersede elements of existing exclusions depends on the type of exclusion.

The following discussion considers codified exclusions separately from exclusions obtained by administrative determination—*i.e.*, solid waste, verified facility, boiler, and non-waste determinations. USEPA's discussion of the exclusions prompts separate consideration.

Applicability to an Existing Codified Exclusion. USEPA divides existing codified exclusions into two groups: those determined excluded from the definition of solid waste before the 2008 DSWR amendments and those determined excluded by the 2008 amendments. USEPA's treatment implies an understanding that the exclusions after the 2015 DSWR amendments are more stringent than the exclusions allowed by the 2008 DSWR amendments but less stringent than the pre-2008 DSWR. *See, e.g.*, 80 Fed. Reg. at 1736 (generator-reclaimed exclusions).

Exclusions under Pre-2008 Rules. With regard to exclusions under the pre-2008 DSWR rules, USEPA stated as follows:

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[95] Parts of the foregoing segments of discussion considered ways some of the new requirements will affect matters outside the scope of HSM reclamation. Examples include the new procedures that apply to boiler determinations and application of the definition of "legitimate recycling" to all HSM reclamation activities, possibly including recycling specific hazardous wastes. Attention here is restricted to applicability to existing exclusions from the definition of solid waste.

> The [2015] final rule does not supersede any of the pre-2008 solid waste exclusions or other prior solid waste determinations or variances, including determinations made in letters of interpretation and inspection reports. If a hazardous secondary material has been determined not to be a solid waste for whatever reason, such a determination remains in effect, unless the authorized state decides to revisit the regulatory determination under their current authority. 80 Fed. Reg. at 1735.

USEPA said that two of the 2015 DSWR revisions will apply to existing pre-2008 DSWR exclusions. These are the new term limits, notification requirements, and other requirements added by the 2015 DSWR amendments, which would apply to HSM excluded under pre-2008 DSWR rules:

1. The new recordkeeping requirement for the speculative accumulation rule of 40 C.F.R. 260.43 (corresponding with 35 Ill. Adm. Code 720.143) will apply. *Id.* at 1735-36; *see* 40 C.F.R. 261.1(c)(8) (corresponding with 35 Ill. Adm. Code 721.101(c)(8)).

2. The documentation, certification, and notification requirements for legitimate recycling of HSM that has hazardous constituent content not comparable to or which cannot be compared with a legitimate product. *Id.* at 1736; *see* 40 C.F.R. 260.43(a)(4)(iii) (corresponding with 35 Ill. Adm. Code 720.143(a)(4)(C)).

Exclusions under the 2008 Amendments. With regard to the exclusions added by the 2008 DSWR amendments, compliance with the more stringent aspects of the rules as amended by the 2015 DSWR amendments is required:

1. For generator-controlled HSM reclamation exclusions under former 40 C.F.R. 261.2(a)(2)(ii) or 261.4(a)(23) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B) or 721.104(a)(23)), compliance with the more stringent aspects of the 2015 DSWR amendments is required: (1) the new definition of "contained" (including container integrity, labeling and compatibility elements)[96]; (2) new requirements for maintenance of shipping records[97]; (3) new requirements for documenting legitimacy[98]; and the new emergency preparedness and response requirements.[99] *See* 80 Fed. Reg. at 1736-37.

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[96] In 40 C.F.R. 260.10 (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.110).

[97] In 40 C.F.R. 261.4(a)(23)(i) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)(A)).

[98] In 40 C.F.R. 261.4(a)(23)(ii)(E) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)(B)(v)); *see* 40 C.F.R. 260.43(a) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.143(a)).

[99] In 40 C.F.R. 261.4(a)(23)(ii)(F) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)(B)(vi)); *see* subpart M of 40 C.F.R. 261,

2. For second-party reclaimed HSM exclusion under former 40 C.F.R. 261.4(a)(24) (corresponding with 35 Ill. Adm. Code 721.104(a)(24), compliance with the more stringent verified intermediate facility and verified reclamation facility requirements added by the 2015 DSWR amendments is required, including: (1) the new definition of "contained" (including container integrity, labeling and compatibility elements)[100]; (2) new conditions and requirements for notice[101]; and (3) new requirements for verification of the reclamation facility and any intermediate facility managing the HSM.[102] *See* 80 Fed. Reg. at 1737.

3. For HSM exported from the U.S. for reclamation under former 40 C.F.R. 261.4(a)(25) (corresponding with 35 Ill. Adm. Code 721.104(a)(25), operations must cease, and the generator must notify USEPA of that cessation. *Id.*

USEPA's *Federal Register* explanation of how more stringent requirements of the 2015 DSWR amendments apply to pre-existing exclusions focused on the changed burden of compliance. If requirements of an exclusion revised by the 2015 amendments do not change the burden of compliance, there was no change for USEPA to discuss. The Board does not believe that USEPA intends to imply selective application of the specific new, more stringent requirements discussed. The Board believes that *all* requirements of the exclusions revised by the 2015 DSWR amendments apply going forward.

Applicability to an Exclusion by Administrative Determination. The segment of text relating to exclusions granted under the pre-2008 DSWR rules, quoted above, and the accompanying discussion make it clear that only the more stringent requirements imposed by the 2015 DSWR amendments supersede existing exclusions, including those granted by an administrative determination.

This is not full explanation of the impact of the 2015 DSWR amendments on existing exclusions. USEPA's discussion does not consider the effect of the newly revised procedural requirements. Specifically, are the requirements for the changed circumstances, limited term, and required notice provisions imposed on these exclusion by 40 C.F.R. 260.33(c), (d), and (e) (corresponding with 35 Ill. Adm. Code 720.133(c), (d), and (e))?

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as added at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with subpart M of 35 Ill. Adm. Code 721).

[100] *See supra* note 96.

[101] In 40 C.F.R. 261.4(a)(24)(v)-(a)(24)(vii) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)(E)-(a)(24)(G)).

[102] In 40 C.F.R. 261.4(a)(24)(ii) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)(B)); *see* 40 C.F.R. 260.31(d) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 720.131(d)). Operation under this exclusion must cease until verification is granted. *See* 80 Fed. Reg. at 1737.

If the changed circumstances and new term limit requirements apply to the existing exclusions granted by administrative determinations, this would include all of the existing solid waste determinations,[103] and boiler determinations that the Board has granted to date by adjusted standard.[104] Must the persons to whom the Board granted these adjusted standards now submit an explanation of changed circumstances? Must these persons apply to the Board for modification of the adjusted standard for review and addition of a fixed term limit? Will these adjusted standards expire by operation of law 10 years after the date they issued or after the effective date of the present amendments?

USEPA's discussion of the substantive criteria for exclusion indicates that *all* of the more stringent substantive aspects of the 2015 DSWR amendments apply to existing exclusions in the same way. Did USEPA intend this to include the more stringent procedural requirements in 40 C.F.R. 260.33(c), (d), and (e) (corresponding with 35 Ill. Adm. Code 720.133(c), (d), and (e)) to apply to existing administrative determinations also—even though USEPA did not discuss applicability of the new procedural requirements?

Under a more conservative interpretation, 40 C.F.R. 260.33(c) would require that a person operating under a "variance" must send a description of the change in circumstances that affects how its HSM meets the criteria in 40 C.F.R. 260.31, 260.32, or 260.34 upon which the "variance" issued. The salient change of circumstances is embodied in the new requirements of 40 C.F.R. 260.33(c), (d), and (e). This is especially true of the 10-year maximum term limit now imposed on a "variance" or non-waste determination by 40 C.F.R. 260.33(d) (corresponding with 35 Ill. Adm. Code 720.133(d)).

This would require that a person issued a solid waste determination (under 35 Ill Adm. Code 720.131(a), (b) or (c)), boiler determination (under 35 Ill Adm. Code 720.132), or non-waste determination (under 35 Ill Adm. Code 720.134) to, at a minimum, submit to the pertinent administrative agency a description of how the changed circumstances of the 2015 DSWR amendments have affected the availability of the existing adjusted standard if sought today. At a minimum, the new 10-year term limit (35 Ill. Adm. Code 720.133(d)) affects how the Board would issue an adjusted standard today for a solid waste determination, verified facility determination, boiler determination, or non-waste determination.[105]

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[103] Those of 35 Ill. Adm. Code 720.131(a), (b), and (c), not the new verified facility determination under 35 Ill. Adm. Code 720.131(d).

[104] The Board has granted several solid waste determinations and two boiler determinations. *See infra* note 105. To date, the Board has granted no non-waste determinations.

[105] Of the solid waste determinations, the Board granted several more than 10 years ago that the Board has not subsequently revised within the past 10 years. *See* Petition of Big River Zinc Corp. for an Adjusted Standard under 35 Ill. Adm. Code 720.131(c), AS 06-4 (May 2, 2002) (zinc oxide from electric arc furnace dust (EAFD)); Petition of World Recycling, Inc. d/b/a Planet Earth Antifreeze for an Adjusted Standard under 35 Ill. Adm. Code 720.131, AS 02-2 (May 2, 2002) (filtered used automotive antifreeze); Petition of Progressive Environmental Services, Inc. for an Adjusted Standard under 35 Ill. Adm. Code 720.131(c), AS 02-7 (Jan. 10,

Applicability to a Determination of Legitimate Recycling. The definition of "legitimate recycling" is self-implementing for all exclusions but those obtained by administrative determination. The Board would determine legitimacy in the context of a solid waste or non-waste determination. *See* 35 Ill. Adm. Code 720.131(c) & (d)(1) & 720.134(b) (2015), as amended at 80 Fed. Reg. 1604 (Jan. 13, 2015) (derived from 40 C.F.R. 260.31(c) & (d) & 260.34(b)). The definition of "legitimate recycling" is now a self-implementing provision that applies to all recycling activities. *See* 35 Ill. Adm. Code 720.143(a) & 721.102(g) (2015), as amended at 80 Fed. Reg. 1604 (Jan. 13, 2015) (derived from 40 C.F.R. 260.43(a) & 261.2(g)). Thus, the generator or reclamation facility would determine legitimacy under any codified exclusion, subject to possible enforcement action for an inappropriate determination.

As discussed above, the codified definition of legitimate recycling formerly applied only to the reclamation-based exclusions added by the 2008 DSWR amendments. One of those exclusions was by administrative determination, and four were codified exclusions. USEPA combined two of the codified exclusions and revised their conditions,[106] changed the conditions

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2002) (filtered used automotive antifreeze); Petition of Horsehead Resource Development Company, Inc. for an Adjusted Standard Under 35 Ill. Adm. Code 720.131(c), AS 00-2 (Feb. 17, 2000) (zinc oxide from EAFD); Petition of Recycle Technologies, Inc. for an Adjusted Standard, AS 97-9 (Sep. 3, 1998) (filtered used automotive antifreeze). The Board has no indication that any of these solid waste determinations was inappropriate. The Board has also denied a solid waste determination for partially reclaimed HSM. *See* Petition of Chemetco, Inc. for an Adjusted Standard form 35 Ill. Adm. Code 720.131(a) and (c), AS 97-2 (Mar. 19, 1998) (mixed metals-bearing wastewater treatment sludge, contaminated soils, and metals smelting slags from mixed metal scraps reclamation). The Board revised one solid waste determination within the last 10 years. *See* Petition of Big River Zinc Corp. for and Adjusted Standard Under 35 Ill. Adm. Code 721.131(c), AS 08-9 (Sep. 4, 2008) (revising the solid waste determination for EAFD granted in Petition of Big River Zinc Corp. for and Adjusted Standard Under 35 Ill. Adm. Code 721.131(c), AS 99-3 (May 6, 1999)). The Board granted two boiler determinations about 10 years ago. *See* Petition of LaFarge Midwest, Inc. for Boiler Determination Through Adjusted Standard Proceedings Pursuant to 35 Ill. Adm. Code 720.132 and 720.133, AS 06-3 (June 1, 2006) (raw mill dryers); Petition of LaFarge Midwest, Inc. for Boiler Determination Pursuant to 35 Ill. Adm. Code 720.132 and 720.133, AS 06-1 (Apr. 20, 2006) (a slag dryer).

[106] *Compare* 40 C.F.R. 261.2(a)(2)(ii) & 261.4(a)(23) (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B) & 721.104(a)(23)) *with* 40 C.F.R. 261.4(a)(23) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)).

for a third codified exclusion,[107] and eliminated a fourth codified exclusion.[108] USEPA further made minor revisions to the exclusion obtained by administrative determination.[109]

The legitimacy determination would have been made for each of these exclusions. To the extent the definition of legitimate recycling imposes more stringent requirements, the Board believes that the regulated entity will be required to make that determination again under the revised definition.[110] The Board further believes that it will be necessary to apply the legitimacy determination to all of the recycling-based exclusions to which the revised definition of legitimate recycling now applies.

The Board reads the *Federal Register* discussion of the 2015 DSWR amendments as requiring the application of more stringent requirements of those amendments to existing exclusions. This includes those aspects of the definition of legitimate recycling that impose more stringent requirements on recycling activities previously not expressly covered by the definition.

The Board has incorporated the revisions to the definition of "legitimate recycling" into the Illinois regulations. The Board has done so with minimal deviation from the text of the federal definition. All deviations from the federal text are listed in Table 3 below in this opinion. The following paragraphs outline the changes that USEPA has made. No further explanation of any of the deviations from the federal language is necessary.

Clarification Prompted by an Agency Comment. The Board believes that clarification is necessary based on an Agency comment (PC 4). The Board requested comment on the revised definition of "legitimate recycling" as it applies to existing codified exclusions. In response. the Agency quoted USEPA's *Federal Register* discussion of the definition and concluded as follows:

> Illinois EPA believes the exclusions impacted by this regulatory change are limited to hazardous secondary materials and we are unaware of anyone operating under the exclusion in 35 Ill. Adm. Code 720.143. Codified exclusions found in other parts of the regulations would not be required to assemble any documentation. PC 14 at p. 7.

The Board agrees that continued operation under an applicable codified exclusion is possible without reevaluating legitimacy, with two exceptions. First, the legitimacy

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[107] *Compare* 40 C.F.R. 261.2(a)(2)(ii) & 261.4(a)(23) (2015) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B) & 721.104(a)(23)) *with* 40 C.F.R. 261.4(a)(23) (2015), as amended at 80 Fed. Reg. 1694 (Jan. 13, 2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)).

[108] *See* 40 C.F.R. 261.4(a)(25) (2015) (corresponding with 35 Ill. Adm. Code 721.104(a)(25)).

[109] *Compare* 40 C.F.R. 260.34 (2015) (corresponding with 35 Ill. Adm. Code 720.134) *with* 40 C.F.R. 260.34 (2015) (corresponding with 35 Ill. Adm. Code 720.134).

[110] The Board granted no non-waste determinations, so the Board does not address the effect of the revised definition on that type of exclusion.

determination is an express pre-condition to the exclusion for HSM reclaimed under the control of the generator and the off-site solvent reclamation exclusion. *See* 35 Ill. Adm. Code 721.104(a)(23)(B)(v) and (a)(24)(D). Second, legitimacy is generally required for operation under all of the reclamation-based exclusions. *See* 35 Ill. Adm. Code 720.143(a) and 721.102(g). To the extent the revised definition of "legitimate recycling" affects the legitimacy of a particular reclamation activity, the Board believes that the applicability of the exclusion may be affected also.

The Board believes it necessary to make two further observations in response to these Agency statements. First, the definition of "hazardous secondary material" is such that it applies to all materials managed under any form of exclusion that allows management other than as hazardous waste. *See* 35 Ill. Adm. Code 720.110 (definition of "hazardous secondary material"). Second, 35 Ill. Adm. Code 720.143 is a requirement that underlies exclusion from definition as solid waste, it is not itself an exclusion.

Removal of Comparable Fuels Rule and the Gasification Rule—
Sections 720.110, 721.104 & 721.138

USEPA adopted the Comparable Fuels Rule (Comparable Fuels Exclusion) in 1998. The Rule conditionally excluded fuels derived from hazardous waste that are comparable to currently used fossil fuels from the definition of solid waste. *See* 63 Fed. Reg. 33782 (June 19, 1998). The court vacated the rule in Natural Resources Defense Council v. EPA, 755 F.3d 1010 (D.C. Cir. 2014).

USEPA adopted the Gasification Rule in 2008 to exclude the oil-bearing HSM that is managed in a gasification system at a petroleum refinery. *See* 73 Fed. Reg. 57 (Jan. 2, 2008). The court vacated the Gasification Rule in Sierra Club v. EPA, 755 F.3d 968 (D.C. Cir. 2014).

USEPA removed the Comparable Fuels Rule and the Gasification Rule on April 8, 2015. *See* 80 Fed. Reg. 18777 (Apr. 8, 2015). This involved removing the exclusion at 40 C.F.R. 721.104(a)(16), revising the exclusion for oil-bearing HSM to remove the reference to gasification at 40 C.F.R. 721.104(a)(12)(i), and removing the conditions for exclusion at 40 C.F.R. 261.38.

Any persons interested in the USEPA actions should refer to the appropriate *Federal Register* notices. Any persons interested to the court opinions and orders that vacated the rules should refer to the appropriate judicial opinion.

The Board has made comparable revisions to the Illinois rules. The Board replaced 35 Ill. Adm. Code 721.104(a)(16) with a statement that maintains structural consistency with the USEPA rules, revised 35 Ill. Adm. Code 721.104(a)(12)(A), and repealed 35 Ill. Adm. Code 721.138. The Board did not deviate from the text of the USEPA text, except to replace the provision marked "reserved" with an explanatory statement. This single deviation from the text of the federal rules is listed in Table 3 below.

**Uniquely Associated Wastes—
Section 721.104**

USEPA adopted the Coal Combustion Residuals (CCR) rule on April 17, 2015. By that rule, USEPA determined not to regulate CCR waste as hazardous waste at this time. USEPA instead established RCRA Subtitle D non-hazardous solid waste rules applicable to disposal of CCR waste. Those Subtitle D requirements are not pertinent to this Board action. USEPA revised the effective date of the CCR rule on July 2, 2015. That revision does not affect the segment of the CCR rule involved in this proceeding. *See* 80 Fed. Reg. 37988 (July 2, 2015).

One aspect of the CCR rule relating to "uniquely associated wastes" prompts Board action. Uniquely associated wastes are low-volume wastes that are excluded from regulation as hazardous waste when they are co-disposed with CCR waste. They include coal-pile runoff, boiler cleaning solutions, boiler blowdown, process water treatment and demineralizer wastes, cooling tower blowdown, air heater and precipitator washes, floor and yard drain and sump effluents, and wastewater treatment sludges. *See* 80 Fed. Reg. 21302, 21460-62 (Apr. 17, 2015). USEPA amended the exclusion from the definition of hazardous waste for residuals from combustion of fossil fuels to also exclude uniquely associated wastes when co-disposed with CCR.

The Board refers persons interested in the substance of the amendments to exclude uniquely associated wastes from the definition of hazardous waste to the *Federal Register* notice of April 17, 2015. The Board incorporated the exclusions into the Illinois regulations at 35 Ill. Adm. Code 721.4(b)(4) without substantive deviation from the federal text of corresponding 40 C.F.R. 261.4(b)(4). The single deviation does not merit discussion. That deviation is listed in Table 3 below.

**Revised List of OECD Member Countries—
Section 722.158**

USEPA revised the list of member countries of the Organization for Economic Cooperation and Development (OECD) on July 2, 2015. The U.S. is signatory to an OECD agreement on the trans-boundary movement of hazardous waste, universal waste, or spent lead-acid batteries. The agreement governs trans-boundary movement among OECD member countries. *See* OECD decision C(2001)107/FINAL (June 14, 2001), as amended by C(2001)107/ADD1 (February 28, 2002), C(2004)20 (March 9, 2004), C(2005)141 (December 2, 2005), and C(2008)156 (December 4, 2008). Estonia, Israel, and Slovenia are now among the 31 member countries that are now parties to the agreement.

Although this USEPA action is outside the nominal time-frame of this update docket, the Board included this action for administrative economy. This obviated separate action and allowed the Board to dismiss reserved RCRA Subtitle C Update, USEPA Amendments (July 1, 2015 through December 31, 2015, R16-15 (Feb. 4, 2016).

The Board incorporated the USEPA revisions to 40 C.F.R. 262.58(a)(1) into corresponding 35 Ill. Adm. Code 722.158(a)(1). The Board did not deviate from the literal text of the USEPA amendments.

USEPA-Prompted Corrections—
Parts 721, 722, 724 through 726 & 728[111]

USEPA has been engaged in review of the Illinois RCRA Subtitle C hazardous waste regulations for the purpose of authorization of the Illinois program. *See* 42 U.S.C. §§ 6926 & 6929 (2013) (RCRA Subtitle C state primacy requirements). USEPA has pointed out a number of differences between the Illinois requirements and their federal counterparts. *See* PC 3 & PC 4. Correction of some of the differences is required because they render the affected Illinois provisions less stringent than the corresponding federal rule. Correction of others is desirable because the differences make the Illinois provision more stringent. Some of the differences have no effect on the relative stringency of the Illinois and federal rules. Finally, USEPA submitted queries.

USEPA has divided the differences into three groups, identifying them as follows:

Tier 1: The Illinois rule is less stringent that the corresponding federal rule, and prompt correction of the Illinois rule is necessary for authorization of a segment of the Illinois program currently under review.

Tier 2: The already-authorized Illinois rule is different from the corresponding federal rule, and correction of the Illinois rule is desirable at any future time. The difference will not affect authorization of any segment of the Illinois program currently under review.

Tier 3: The Illinois rule is different from the corresponding federal rule, in some instances in a way that makes the Illinois provision more stringent. Correction of the Illinois rule is at the discretion of the Board because the difference will not affect authorization of the Illinois program.

The Board has included in the record all communications that relate to any non-procedural aspects of a rule.

The Board has chosen to use introduction to the docket as public comments as the mechanism for making these communications part of the record. Other options might include introduction as filings or as exhibits. Introduction as public comments seems more appropriate than either option.

The Board understands that the term "comment" may have a particular meaning under federal authorities. *See, e.g.*, 40 C.F.R. 271.19 (2015) (USEPA comment on state RCRA permit actions). The Board intends that filing this input as comments reflects its own practice.

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[111] Sections 721.103, 721.104, 721.107, 721.132, 721.133, 721.135, 721.Appendix H, 722.132, 722.158, 724.194, 724.244, 724.245, 724.414, 724.670, 724.671, 724.989, 724.1102, 725.173, 725.440, 725.502, 725.964, 725.983, 725.986, 726.203, 726.Appenix G, 727.290, 728.101, 728.107, 728.Appendices C & G & 728.Table T

Table 1 below lists the various USEPA suggestions and queries. Each entry briefly summarizes the USEPA suggestion or query and the Board's response. Most entries outline the source of any differences between the Illinois and federal regulations. Table 4 below lists all of the corrections made in this rulemaking that are not directly derived from current federal amendments as "Board Housekeeping Amendments." The revisions made based on USEPA suggestions are parenthetically designated as originated from USEPA.

Board-Initiated Corrections and Updates

The Board routinely examines federal amendments and the base text of rules open for amendments to find any areas that need correction or clarification. The Joint Committee on Administrative Rules (JCAR) and the Office of the Secretary of State also routinely examine the text and suggest corrections and clarifications. Sometimes suggestions arise from the Illinois Environmental Protection Agency, USEPA, or members of the regulated community. The Board often makes revisions as a result.

The revisions thus made are not directly derived from federal amendments. The Board is ever mindful of the limited discretion authorized in the context of an identical-in-substance proceeding. The Board is limited to (1) "those changes that are necessary for compliance with the Illinois Administrative Code"; (2) "technical changes that in no way change the scope or meaning of any portion of the regulations"; (3) "USEPA rules that are not applicable to persons or facilities in Illinois"; (4) "things which are outside the Board's normal functions"; and (5) "apparent typographical and grammatical errors." *See* 415 ILCS 5/7.2(a), (a)(1), (a)(2), and (a)(7) (2012). Thus, the Board will only make minor, non-substantive corrections and clarifications in this context.

The Board is including a limited number of corrections and clarifications in this docket. The Board has cataloged a small number of necessary corrections and clarifications since the last RCRA Subtitle C update docket, RCRA Subtitle C Update, USEPA Amendments (January 1, 2014 through June 30, 2014), R15-1 (Dec. 18, 2014).

The Board has made a limited number of changes in the text of various rules that are not directly based on USEPA actions during January 1, 2015 through June 30, 2015. The following segments of discussion consider the amendments added by the Board. The Board will not discuss most of the particular corrective amendments in detail. All corrections are itemized in Table 4, which appears at the end of the opinion segment of this opinion and order. The following segments briefly discuss what the Board believes are the more salient of the corrections. There is no discussion of the rest of the corrections that appear in Table 4.

The Board requests that the Agency, JCAR, USEPA and the regulated community review the table and the text of the corrections and comment as necessary. The Board also requests ongoing assistance of the Agency, JCAR, and the regulated community in the process of spotting and correcting errors or omissions in the rules. The Board requests that interested persons submit suggestions for the correction of any errors of which they become aware. The Board will either include the corrections in this docket or catalog them for future revisions if the suggestions relate to segments of the text that are not already involved in this proceeding.

Completing Revisions Intended in Prior Amendments—Section 724.171

The Board intended to correct two cross-references in the prior RCRA Subtitle C update docket. *See* RCRA Subtitle C Update, USEPA Amendments (January 1, 2014 through June 30, 2014), R15-1 (Dec. 18, 2014), slip op. at pp. 38, 41-42, 181, 192. The Board inadvertently omitted these corrections from the text of the amendments filed with the Secretary of State. JCAR pointed out the omission and requested correction. *See* PC 5 (dated January 28, 2015) in RCRA Subtitle C Update, USEPA Amendments (January 1, 2014 through June 30, 2014), R15-1 (Dec. 18, 2014).

The Board now corrects the oversight and revises the cross-references in 35 Ill. Adm. Code 724.171(a)(2)(B) and (j). The minor revisions in the corresponding text are listed in Table 4 below.

Removing the Financial Assurance Forms from the Standardized Permit Rules—Appendix A to Part 727

The Board included the financial assurance forms prescribed by USEPA when adopting the Standardized Permit Rule in UIC Update, USEPA Amendments (July 1, 2005 through December 31, 2005), R06-16, RCRA Subtitle D Update, USEPA Amendments (July 1, 2005 through December 31, 2005), R06-17, RCRA Subtitle C Update, USEPA Amendments (July 1, 2005 through December 31, 2005 and March 23, 2006), R06-18 (Nov. 16, 2006) (consol.). Illustration A in Appendix A to 35 Ill. Adm. Code 727 sets forth the prescribed letter of the Chief Financial Officer for financial assurance for facility closure. Illustration B in Appendix A to 35 Ill. Adm. Code 727 sets forth the prescribed letter of the Chief Financial Officer for financial assurance for liability coverage. At that time, 35 Ill. Adm. Code 727.240(l) required use of financial instruments worded as provided in those forms.

The Board later revised 35 Ill. Adm. Code 727.240(l) to require use of designated forms for all types and mechanisms of financial assurance. The Board further required the Agency to develop forms for dissemination to and use by regulated entities. The Board left Illustrations A and B of Appendix A intact. *See* RCRA Subtitle C Update, USEPA Amendments (July 1, 2012 through December 31, 2012, R13-15 (Sep. 5, 2013), slip op. at pp. 30-33.

In PC 10, JCAR asked why the Board is repealing the financial responsibility forms in Appendix A in an identical-in-substance proceeding. Board staff responded to JCAR in significant part as follows:

> The repeal of the Appendix A forms was done under the general authority under 415 ILCS 5/7.2 to correct identical-in-substance rules as necessary to comport with federal requirements using the identical-in-substance procedure. The repeal of Appendix A is an action limited to making the Illinois hazardous waste rules consistent with and no less stringent than the corresponding USEPA rules on which they are based.
>
> The repeal of Appendix A removes a potential for confusion as to the forms appropriate for use in Illinois. Illinois law sometimes forces rewording of the federal financial assurance forms. The rewording is usually needed to ensure that

> the Illinois forms have the same force and effect as is intended by USEPA. The Board rules limit any Agency amendments to the USEPA language to just such revisions. The Agency submits the forms to USEPA for USEPA review and approval, to ensure that the Illinois forms comply with USEPA's intent.
>
> Thus, the Board rules establish the standard that regulated entities use USEPA-compliant forms for financial assurance. The mechanics of the Agency working with USEPA to ensure that any revisions to the forms comport with USEPA requirements is implementation of that Board-established standard. The mechanics of the Agency working with USEPA to ensure compliant forms neither establishes nor revises any standard in the regulatory scheme. Rather, the Agency working with USEPA is restricted to implementation of the Illinois program within the Agency's duties and authorized functions described in 415 ILCS 5/4 and 39.
>
> The entities required to submit financial assurance (using the prescribed forms) are hazardous waste treatment, storage, and disposal (T/S/D) facilities. Should any T/S/D facility owner or operator have an issue with the forms required by the Agency, they have the right to appeal the Agency determination before the Board pursuant to 415 ILCS 5/40. PC 10 at p. 1.

The Board observes that repeal of the forms in Appendix A makes the financial assurance requirements of the Standardized Permit Rule parallel the financial assurance provisions for T/S/D facilities in Subparts H of 35 Ill. Adm. 724 and 725 under the T/S/D facility standards, regulated entities must use forms specified by the Agency as derived from the forms required by USEPA under 40 C.F.R. 265.151. *See* 35 Ill. Adm. Code 724.251.

The Board now repeals Illustrations A and B of Appendix A to 35 Ill. Adm. Code 727. Both provisions are obsolete and unused. Letting them remain may cause confusion. This further causes the Board to remove the entries for these provisions from the correlation tables Table A and Table B in Appendix B. The revisions are indicated in Table 4 below.

Addition of Systematic Names and CAS Numbers—Appendix C to Part 728

Chemical substances are identified in a number of ways. There are common chemical names, systematic names, and various symbolic and numerical identifiers. One chemical compound can have multiple common names, and there are various systematic, symbolic and coded,[112] and numeric naming schemes. The most widely used systematic naming scheme is the

[112] Examples include the International Chemical Identifier (InChI) and InChIKey from IUPAC (website: http://www.iupac.org/home/publications/e-resources/inchi.html) and simplified molecular-input line-entry system (SMILES), initially developed by USEPA (website: http://www.opensmiles.org/).

International Union of Pure and Applied Chemistry (IUPAC)[113] scheme.[114] The most widely used numeric naming scheme is the Chemical Abstract Service (CAS) number.[115]

The Board has determined to begin use of standardized naming for chemical compounds and to sharpen that identification with a CAS number. A chemical name and symbolic or coded chemical identifier can convey knowledge of structure. The systematic naming schemes do so consistently. A CAS number conveys no information about the chemical whatsoever, unless the number is used to reference the chemical. A CAS number refers only to a specific chemical, isomer, mixtures, or mixtures of isomers. The following simple example illustrates the multiplicity of chemical names and the need for specificity when identifying chemicals by name.

The common name butyl alcohol (generic structural formula C_4H_8OH) can identify four distinct chemical isomers:

n-butyl alcohol[116] (common name of specific isomer with structural formula $CH_3CH_2CH_2CH_2OH$):
alternative common names: *n*-butanol, butyric alcohol, propylcarbinol, etc.
systematic names: butan-1-ol (IUPAC) or 1-butanol (EPA SRS and TSCAINV)
CAS Number: 71-36-3

sec-butyl alcohol[117] (common name of specific isomer with structural formula $CH_3CH(OH)CH_2CH_3$):
alternative common names: *sec*-butanol, 1-methyl propanol, etc.
systematic names: butan-2-ol (IUPAC) or 2-butanol (EPA SRS and TSCAINV)
CAS Number: 78-92-2

tert-butyl alcohol[118] (common name of specific isomer with structural formula $(CH_3)_3COH$):
alternative common names: *tert*-butanol, 2-methyl-2-propanol, isopropyl carbinol, etc.

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[113] Website: www.iupac.org. Other systems are used by USEPA, including the Substance Registry System (SRS) (website: http://ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do) and the Chemical Substance Inventory (TSCAINV) (website: http://www.epa.gov/tsca-inventory.

[114] An online guide to IUPAC nomenclature: http://www.acdlabs.com/iupac/nomenclature/.

[115] Website: http://www.cas.org/content/chemical-substances.

[116] InChI: 1S/C4H10O/c1-2-3-4-5/h5H,2-4H2,1H3. InChIKey: LRHPLDYGYMGRHN-UHFFFAOYSA-N. SMILES: C(CC)CO.

[117] InChI: 1S/C4H10O/c1-3-4(2)5/h4-5H,3H2,1-2H3. InChIKey: BTANRVKWQNVYAZ-UHFFFAOYSA-N. SMILES: CCC(C)O.

[118] InChI: 1S/C4H10O/c1-4(2,3)5/h5H,1-3H3. InChIKey: DKGAVHZHDRPRBM-UHFFFAOYSA-N. SMILES: CC(C)(C)O.

systematic names: 2-methylpropan-2-ol (IUPAC) or 2-methyl-2-propanol (EPA SRS and TSCAINV)
CAS Number: 75-65-0

iso-butyl alcohol[119] (common name of specific isomer with structural formula $(CH_3)_2CHCH_2OH$):
alternative common names: isobutyl alcohol, *iso*-butanol, 2-methyl-1-propanol, isopropylcarbinol, etc.
systematic names: 2-methylpropan-1-ol (IUPAC) or 2-methyl-1-propanol (EPA SRS and TSCAINV)
CAS Number: 78-83-1

The Board wishes to instill greater certainty as to the chemical substances indicated by the regulations. As a first step, the Board has revised the listing of regulated halogenated organic compounds in Appendix C to 35 Ill. Adm. Code 728 and the list of maximum concentrations of constituents for groundwater protection in table 1 in 35 Ill. Adm. Code 724.194(a). The Board parenthetically added the CAS number for each chemical named in the list. In Appendix C, the Board further parenthetically added a systematic name for each chemical where the name already listed is not already a systematic name. For the arochlors and PCBs not otherwise specified, adding the systematic chemical name was not possible because these are mixtures of chemical isomers. Any attempt to add a systematic chemical name would have excluded isomers not named.

Adding the CAS number for one of the chemicals illustrates this potential pitfall. The Board added two CAS numbers for the entry for tetrachlorodibenzofuran. CAS number 30402-14-3 relates to the 1,2,3,4-tetrachlorodibenzofuran congener. CAS No. 55722-27-5 refers to the 2,3,7,8-tetrachlorodibenzofuran congener. The Board did not find a single CAS number that would embrace both congeners. The Board added both CAS numbers to avoid excluding either congener.

The Board notes that this treatment is consistent with the listing of hazardous constituents in Appendix H to 35 Ill. Adm. Code 721, which is also open for amendment in this proceeding. Appendix H, however, uses the CAS name instead of the IUPAC name or USEPA systematic name. The lists of commercial and off-specification chemical products and manufacturing chemical intermediates listed in 35 Ill. Adm. Code 721.133(e) and (f) includes the CAS number and a mix of common and systematic names to identify the chemicals. In the lists in Appendix H or Section 721.133(e) and (f), there is specificity in identification of the chemicals. The Board is not now making any conforming changes in Appendix H and Section 721.133. The Board may do so in the future—in these provisions and other lists chemicals.

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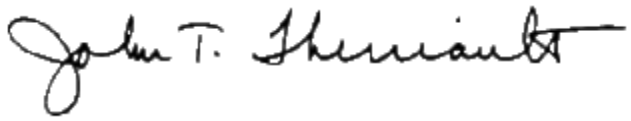
[119] InChI: 1S/C4H10O/c1-4(2)3-5/h4-5H,3H2,1-2H3. InChIKey: ZXEKIIBDNHEJCQ-UHFFFAOYSA-N. SMILES: C(CO)(C)C.

I, John T. Therriault, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion on June 16, 2016, by a vote of 5-0.



John T. Therriault, Clerk
Illinois Pollution Control Board

MATERIALS APPENDED TO SUPPORT THE OPINION

General Explanations of Board Deviation from the Literal Text of Federal Rules

When incorporating the federal rules into the Illinois system, the Board cannot always follow their literal text. Some deviation from the literal federal text is unavoidable. There are a variety reasons that copying the federal text is not possible.

Deviation arises through differences between the federal and state regulatory structure and systems. In Illinois, the responsibilities are divided among several entities—principally between the Board and the Agency.[120] *See* 415 ILCS 5/4 and 5 (2014). The scope of the particular identical-in-substance mandate may not embrace all aspects of the USEPA action involved in a particular proceeding. Further, the Illinois environmental regulations are organized differently than are the more extensive rules of USEPA, sometimes requiring the Board to adapt many of the federal requirements into segments of the Illinois rules. Finally, the Board must comply with the Illinois Administrative Procedure Act (5 ILCS 100 (2012)) and codification requirements of the Office of the Secretary of State (1 Ill. Adm. Code 100) when incorporating the federal requirements.

Another source of deviation from the literal federal text of a rule relates to updating incorporations by reference and references and source-citations to federal rules. Sometimes this involves federal rules that are part of the USEPA action that prompts the Board amendments. The Board has incorporated many segments of USEPA rules by reference, so that updating the references completes the amendments without use of the literal text of federal amendments. At other times, the deviation is the result of updated federal regulations that are not directly involved in an underlying USEPA action within the timeframe of the docket. The Board has incorporated federal regulations not directly involved by reference because USEPA has cited to unrelated USEPA rules or rules of other federal agencies. As a result, the Board routinely examines federal regulations that are incorporated by reference or source-cited in the Illinois rules and updates the references and citations to ensure reliance on the most recent versions, unless incorporation of an earlier version is required.

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[120] Many other State agencies have some role to play in many functions under the Environmental Protection Act: the Department of Commerce and Community Affairs (*see* 415 ILCS 5/22, 22.23, 22.34, 25, 27, 55, 55.2, 55.6, 55.7, 55.14, 55.14a, and 55.15 (2012)), the Department of Natural Resources (*see* 415 ILCS 5/17.1-17.3, 27, and 55.6 (2012)), the Department of Agriculture (*see* 415 ILCS 5/14.3, 14.6, 22.2, 22.34, 22.35, 39.4, and 55.6 (2012)), the Illinois Department of Transportation (*see* 415 ILCS 5/3.135, 22.51, 39, and 39.2 (2012)), the Office of the State Fire Marshall (*see* 415 ILCS 5/22.12, 57.3-57.6, 57.9, and 57.11 (2012)), the Illinois Emergency Management Agency (*see* 415 ILCS 5/13.6, 25a-1, 25b, and 57.5 (2012)), the Department of Public Health (*see* 415 ILCS 5/13.2, 22.55, 25d-6, 55.2, and 55.6 (2012)), and the Department of Labor (*see* 415 ILCS 5/52 (2012)). Although the Board must remain mindful of the roles of every State agency in a particular subject matter area, the major divisions of authority of concern in identical-in-substance proceedings are those between the Board and the Agency.

Some deviation also arises through errors in and problems with the federal text itself. The language of many federal rules differs stylistically from the Board's preferences. The Board also sometimes finds segments of federal text that are less than clear or which contain errors. The Board conforms the federal text to the Illinois rules and regulatory scheme and corrects errors found in the text in the course of these routine update rulemakings.

The following discussion segments explain in broad terms some of the changes to the literal text of federal rules that the Board makes on a more routine basis. What follows are general consideration of deviation from the literal text of federal rules that are prompted by three sources: (1) the divisions of authority between the Board and Agency under the Act; (2) routine updating of incorporations by reference of and citations to the *Code of Federal Regulations*; and (3) stylistic changes, clarifications, and corrections routinely made.

The Board will not further discuss changes prompted by three other causes: (1) differences in regulatory structure; (2) the scope of an identical-in-substance mandate, or (3) Illinois rulemaking procedure and codification requirements. The Board includes discussion of deviation caused by these considerations in substantive segments of opinions when issues arise.

Agency or Board Action. Section 7.2(a)(5) of the Act requires the Board to specify those portions of the program over which USEPA will retain decision making authority. Based on the general division of functions within the Act and other Illinois statutes, the Board is also to specify which State agency is to make decisions.

In situations in which the Board has determined that USEPA will retain decision-making authority, the Board has replaced "Regional Administrator" with USEPA, so as to avoid specifying which office within USEPA is to make a decision.

In some identical-in-substance rules, certain decisions pertaining to a permit application are not appropriate for the Agency to consider. In determining the general division of authority between the Agency and the Board, the following factors should be considered:

1. Whether the entity making the decision is applying a Board regulation, or taking action contrary to, *i.e.*, "waiving," a Board regulation. It generally takes some form of Board action to "waive" a Board regulation.

2. Whether there is a clear standard for action such that the Board can give meaningful review to an Agency decision.

3. Whether the action would result in exemption from the permit requirement itself. If so, Board action is generally required.

4. Whether the decision amounts to "determining, defining or implementing environmental control standards" within the meaning of Section 5(b) of the Act. If so, it must be made by the Board.

There are four common classes of Board decisions: variance, adjusted standard, general and site-specific rulemaking, and enforcement. The first three are methods by which a regulation can be temporarily postponed (variance) or adjusted to meet specific situations (adjusted

standard or site-specific rulemaking). There often are differences in the nomenclature for these decisions between the USEPA and Board regulations.

Routine Board Stylistic Changes, Clarifications, and Corrections. In addition to the amendments derived from federal amendments, the Board often makes necessary alterations in the text of various passages of the existing rules as provisions are opened for update in response to USEPA actions. This involves correcting deficiencies, clarifying provisions, and making other changes that are necessary to establish a clear set of rules that closely parallel the corresponding federal requirements within the codification scheme of the *Illinois Administrative Code*.

The Board substituted "or" for "/" in most instances where this appeared in the federal base text, using "and" where more appropriate. The Board further used this opportunity to make a number of corrections to punctuation, grammar, spelling, and cross-reference format throughout the opened text. The Board changed "who" to "that" and "he" or "she" to "it," where the person to which the regulation referred was not necessarily a natural person, or to "he or she," where a natural person was evident; changed "which" to "that" for restrictive relative clauses; substituted "must" for "shall"; capitalized the section headings and corrected their format where necessary; and corrected punctuation within sentences.

In addition, the federal rules have been edited to establish a uniform usage throughout the Board's regulations. For example, with respect to "shall," "will," and "may," "must" is used when an action is required by the rule, without regard to whether the action is required of the subject of the sentence or not. "Shall" is no longer used, since this word is not used in everyday language. Thus, where a federal rule uses "shall," the Board substitutes "must." This is a break from our former practice where "shall" was used when the subject of a sentence has a duty to do something. "Will" is used when the Board obliges itself to do something. "May" is used when choice of a provision is optional. "Or" is used rather than "and/or," and denotes "one or both." "Either . . . or" denotes "one but not both." "And" denotes "both."

The Joint Committee on Administrative Rules has requested that the Board refer to the United States Environmental Protection Agency in the same manner throughout all of our bodies of regulations—*i.e.*, air, water, drinking water, RCRA Subtitle D (municipal solid waste landfill), RCRA Subtitle C (hazardous waste), underground injection control (UIC), etc. The Board has decided to refer to the United States Environmental Protection Agency as "USEPA." The Board will continue this conversion in future rulemakings as additional sections become open for amendment. The Board will further convert "EPA" used in federal text to "USEPA," where USEPA is clearly intended.

The Board has assembled tables to aid in the location of these alterations and to briefly outline their intended purpose. These are explained in the introductory paragraph of the following opinion segment.

Historical Summaries of the RCRA Subtitle C and UIC Regulations

While the Board formerly included a historical summary of the Illinois RCRA Subtitle C and underground injection control (UIC) regulations and programs in the opinion segment of

every update to these regulations, the Board ended that practice in RCRA Subtitle C Update, USEPA Amendments (January 1, 2011 through June 30, 2011), R12-7 (Apr. 19, 2012). Persons wishing to review the historical summary of the Illinois RCRA Subtitle C and UIC regulations and programs as it stood on March 1, 2016 must consult the Board's website to do so.

Table A: List of Exclusions from the Definition of Solid Waste

HSM when reclaimed under the control of the generator and managed only in non-land-based units.

Citation: Formerly 40 C.F.R. 261.2(a)(2)(ii) (corresponding with 35 Ill. Adm. Code 721.102(a)(2)(B)).
Adopted by USEPA: October 30, 2008 (at 73 Fed. Reg. 64668).
Revised and combined into 40 C.F.R. 261.4(a)(23) by USEPA: January 13, 2015 (at 80 Fed. Reg. 1694). See entry for HSM reclaimed under the control of the generator below.
Conditions:

- The HSM must be generated and reclaimed within the U.S.
- The HSM must not be subject to another exclusion.
- The HSM must not be a spent lead-acid battery.
- The HSM must not be USEPA hazardous waste number K171 or K172.
- No speculative accumulation.
- Attention directed to notice requirements (40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- The HSM must be contained.
- Must be legitimate reclamation (as determined pursuant to 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).

HSM when reclaimed under the control of the generator and managed in land-based units.

Citation: Formerly 40 C.F.R. 261.4(a)(23) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)).
Adopted by USEPA: October 30, 2008 (at 73 Fed. Reg. 64668).
Revised and combined with 40 C.F.R. 261.2(a)(2)(iv) by USEPA: January 13, 2015 (at 80 Fed. Reg. 1694). See entry for HSM reclaimed under the control of the generator below.
Conditions:

- The HSM must be generated and reclaimed within the U.S.
- The HSM must be generated and reclaimed under the control of the generator.
- The HSM must not be subject to another exclusion.
- The HSM must not be a spent lead-acid battery.
- The HSM must not be USEPA hazardous waste number K171 or K172.
- No speculative accumulation.
- Must be legitimate reclamation (as determined pursuant to 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- Must submit notice before starting reclamation (as required by 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- The HSM must be contained.

HSM reclaimed under the control of the generator.

Citation: Now 40 C.F.R. 261.4(a)(23) (corresponding with 35 Ill. Adm. Code 721.104(a)(23)).

Revised version of two formerly separate exclusions now combined by USEPA: January 13, 2015 (at 80 Fed. Reg. 1694).

Conditions:

- The HSM must be generated and reclaimed within the U.S.
- The HSM must be (1) generated and reclaimed at the generating facility, (2) reclaimed at a facility under the control of the generator if a different facility; or (3) reclaimed by a tolling contractor under a written contract between a tolling manufacturer and the tolling contractor.
- The HSM must be contained.
- No speculative accumulation.
- The HSM must not be subject to another exclusion.
- The HSM must not be a spent lead-acid battery.
- A facility managing the HSM has provided notice (as required by 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- The recycling facility must document that the recycling is legitimate (how the recycling meets the four criteria of 40 C.F.R. 260.43(a), corresponding with 35 Ill. Adm. Code 720.143(a)).
- Must comply with emergency preparedness and response requirements (in subpart M of 40 C.F.R. 721, corresponding with Subpart M of 35 Ill. Adm. Code 721).

HSM when transferred to a person other than the generator for reclamation.

Citation: Former 40 C.F.R. 261.4(a)(24) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)).

Adopted by USEPA: October 30, 2008 (at 73 Fed. Reg. 64668).

Revised by USEPA: January 13, 2015 (at 80 Fed. Reg. 1694). See the entry for HSM transferred to a verified reclamation facility for reclamation below.

Conditions:

- The HSM must be generated and reclaimed within the U.S.
- The HSM must not be subject to another exclusion.
- The HSM must not be a spent lead-acid battery.
- The HSM must not be USEPA hazardous waste number K171 or K172.
- No speculative accumulation.
- The HSM must not be handled by any person other than the generator, the transporter, an intermediate facility, or the reclaimer.
- The HSM must not be stored more than 10 days at a transfer facility.
- The HSM must be packaged in compliance with U.S. DOT requirements.
- Generator must make reasonable efforts to ensure that the reclamation is legitimate and that the reclaimer will manage the material to protect human health and the environment, where the reclaimer is not a hazardous waste T/S/D facility.
- Generator must make contractual arrangements with the intermediate facility to ensure that the HSM will be sent to the reclamation facility indicated, that the intermediate facility will manage the HSM to protect human health and the environment, where the intermediate facility is not a hazardous waste T/S/D facility.

- Generator must document its reasonable efforts and maintain records as specified.
- Generator must document offsite shipments of HSM and maintain records as specified.
- Reclaimer and intermediate facility must document all receipts and offsite shipments of HSM and maintain records as specified.
- Intermediate facility must forward all shipments of HSM to the reclamation facility specified by the generator.
- Reclaimer and intermediate facility must send specified confirmations of receipt to the generator for all off-site shipments of HSM.
- Reclaimer and intermediate facility must manage HSM as protective of human health and the environment as management of analogous raw material.
- Must be legitimate reclamation (as determined pursuant to 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- Reclaimer must manage residues of reclamation in a way that is protective of human health and the environment, and residuals are hazardous waste if themselves specifically listed as such or if they exhibit a characteristic of hazardous waste.
- Reclaimer and intermediate facility must maintain specified financial assurance.
- Anyone claiming exclusion must submit notice before starting reclamation (as required by 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- The HSM must be contained.

HSM transferred to a verified reclamation facility for reclamation.

Citation: Revised 40 C.F.R. 261.4(a)(24) (corresponding with 35 Ill. Adm. Code 721.104(a)(24)).

Revised by USEPA: January 13, 2015 (at 80 Fed. Reg. 1694).

Conditions:

- No speculative accumulation.
- The HSM must not be stored more than 10 days at a transfer facility.
- The HSM must be packaged in compliance with U.S. DOT requirements.
- The HSM must not be subject to another exclusion.
- The HSM must not be a spent lead-acid battery.
- Must be legitimate reclamation (as determined pursuant to 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- The HSM must be contained.
- The reclamation must occur at a verified reclamation facility (granted a solid waste determination pursuant to 40 C.F.R. 260.31(d), corresponding with 35 Ill. Adm. Code 720.131(d)), or a RCRA-regulated hazardous waste, used oil, or universal waste facility within the U.S.
- Any intermediate facility through which the HSM passes must be a verified intermediate facility (granted a solid waste determination pursuant to 40 C.F.R. 260.31(d), corresponding with 35 Ill. Adm. Code 720.131(d)), or a RCRA-regulated hazardous waste, used oil, or universal waste facility within the U.S.
- The HSM generator must have a contract with any verified intermediate facility to ensure delivery to the reclamation facility named in the shipping papers.
- The HSM generator must document offsite shipments of HSM and maintain records as specified.

- The HSM generator must retain confirmations of receipt for offsite shipments of HSM and maintain records as specified.
- The HSM generator must comply with emergency preparedness and response requirements (in subpart M of 40 C.F.R. 721, corresponding with Subpart M of 35 Ill. Adm. Code 721).
- The intermediate facility and reclamation facility must document offsite shipments of HSM and maintain records as specified.
- The intermediate facility must forward all shipments of HSM to the reclamation facility specified by the generator.
- The intermediate facility and reclamation facility must send specified confirmations of receipt to the generator for all off-site shipments of HSM.
- The intermediate facility and reclamation facility must manage HSM as protective of human health and the environment as management of analogous raw material.
- The reclamation facility must manage residues of reclamation in a way that is protective of human health and the environment, and residuals are hazardous waste if themselves specifically listed as such or if they exhibit a characteristic of hazardous waste.
- The intermediate facility and reclamation facility must maintain specified financial assurance.
- The intermediate facility and reclamation facility must have obtained an administrative determination (a solid waste determination pursuant to 40 C.F.R. 260.31(d), corresponding with 35 Ill. Adm. Code 720.131(d))
- Anyone claiming exclusion must submit notice before starting reclamation (as required by 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).

HSM exported for reclamation.

Citation: Formerly 40 C.F.R. 261.4(a)(25) (corresponding with 35 Ill. Adm. Code 721.104(a)(25)).

Adopted by USEPA: October 30, 2008 (at 73 Fed. Reg. 64668).

Removed by USEPA: January 13, 2015 (at 80 Fed. 1694).

Conditions:

- The HSM must not be subject to another exclusion.
- The HSM must not be a spent lead-acid battery.
- The HSM must not be USEPA hazardous waste number K171 or K172.
- No speculative accumulation.
- The HSM must not be handled by any person other than the generator, the transporter, an intermediate facility, or the reclaimer.
- The HSM must not be stored more than 10 days at a transfer facility.
- The HSM must be packaged in compliance with U.S. DOT requirements.
- Generator must make reasonable efforts to ensure that the reclamation is legitimate and that the reclaimer will manage the HSM to protect human health and the environment, where the reclaimer is not a hazardous waste T/S/D facility.
- Generator must make contractual arrangements with the intermediate facility to ensure that the HSM will be sent to the reclamation facility indicated, that the intermediate facility will manage the material to protect human health and the environment, where the intermediate facility is not a hazardous waste T/S/D facility.

- Generator must document its reasonable efforts and maintain records as specified.
- Generator must document offsite shipments of HSM and maintain records as specified.
- Generator must submit Notification of Intent to Export to USEPA and receive Acknowledgement of Consent to Export before export. (Implicit consent may be inferred as to any Organization for Economic Co-operation and Development (OECD) member country that has not responded to the Notification.)
- Generator must maintain records of Notifications and Acknowledgements and file reports with USEPA as specified.
- Must be legitimate reclamation (as determined pursuant to 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- Anyone claiming the exclusion must submit notice before starting reclamation (as required by 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- The HSM must be contained.

HSM transferred for remanufacturing.

Citation: New 40 C.F.R. 261.4(a)(27) (corresponding with 35 Ill. Adm. Code 721.104(a)(27)).

Adopted by USEPA: January 13, 2015 (at 80 Fed. 1694).

Conditions:

- The HSM must be one or more of 18 specified hazardous spent solvents.
- The HSM must have originated from using one or more of the 18 specified solvents in in a commercial grade for reacting, extracting, purifying, or blending chemicals in any of four specified industries.
- The HSM generator must send the HSM to a remanufacturer in on one of the four specified industries.
- After remanufacturing, the remanufactured hazardous spent solvents must be used for reacting, extracting, purifying, or blending chemicals in any of four specified industries or for use as ingredients in a product.
- After remanufacturing, use of the remanufactured solvent must not involve cleaning, degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles.
- The HSM generator and the reclaimer must submit and update notice (as required by 40 C.F.R. 260.42, corresponding with 35 Ill. Adm. Code 720.142).
- The HSM generator and the reclaimer must and maintain a written remanufacturing plan that includes specified information.
- The HSM generator and the reclaimer must retain records of shipments and confirmations of receipts of hazardous spent solvents.
- The HSM generator and the reclaimer must store hazardous spent solvents in tanks and containers that meet specified requirements.
- The HSM generator and the reclaimer must certify compliance with Clean Air Act emissions control requirements during storage and remanufacturing.
- No speculative accumulation.

Table B: USEPA Amendments to the Definition of Legitimate Recycling

§ 260.43 Legitimate recycling of hazardous secondary materials ~~regulated under § 260.34, § 261.2(a)(2)(ii), and § 261.4(a)(23), (24), or (25)~~.

(a) ~~Persons regulated under § 260.34 or claiming to be excluded from hazardous waste regulation under § 261.2(a)(2)(ii), § 261.4(a)(23), (24), or (25) because they are engaged in reclamation must be able to demonstrate that the recycling is~~ Recycling of hazardous secondary materials for the purpose of the exclusions or exemptions from the hazardous waste regulations must be legitimate. Hazardous secondary material that is not legitimately recycled is discarded material and is a solid waste. In determining if their recycling is legitimate, persons must address all the requirements of ~~§ 260.43(b) and must consider the requirements of § 260.43(c) below~~ this paragraph.

(~~b~~1) Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product or intermediate of the recycling process~~, and the recycling process must produce a valuable product or intermediate.~~ The hazardous secondary material provides a useful contribution if it:

~~(1) The hazardous secondary material provides a useful contribution if it~~

(i) Contributes valuable ingredients to a product or intermediate; or

(ii) Replaces a catalyst or carrier in the recycling process; or

(iii) Is the source of a valuable constituent recovered in the recycling process; or

(iv) Is recovered or regenerated by the recycling process; or

(v) Is used as an effective substitute for a commercial product.

(2) The recycling process must produce a valuable product or intermediate. The product or intermediate is valuable if it is:

(i) Sold to a third party; or

(ii) Used by the recycler or the generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process.

~~(c) The following factors must be considered in making a determination as to the overall legitimacy of a specific recycling activity.~~

(~~1~~3) The generator and the recycler ~~should~~ must manage the hazardous secondary material as a valuable commodity when it is under their control.

Where there is an analogous raw material, the hazardous secondary material ~~should~~ must be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material, the hazardous secondary material ~~should~~ must be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded.

(4) The product of the recycling process must be comparable to a legitimate product or intermediate:

(i) Where there is an analogous product or intermediate, the product of the recycling process is comparable to a legitimate product or intermediate if:

(~~2~~A) The product of the recycling process does not

~~(i) Contain significant concentrations of any hazardous constituents found in appendix VIII of part 261 that are not found in analogous products; or~~

~~(ii) Contain concentrations of any hazardous constituents found in appendix VIII of part 261 at levels that are significantly elevated from those found in analogous products; or~~

~~(iii) Exhibit~~ exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit~~.~~, and

(B) The concentrations of any hazardous constituents found in appendix VIII of part 261 of this chapter that are in the product or intermediate are at levels that are comparable to or lower than those found in analogous products or at levels that meet widely-recognized commodity standards and specifications, in the case where the commodity standards and specifications include levels that specifically address those hazardous constituents.

(ii) Where there is no analogous product, the product of the recycling process is comparable to a legitimate product or intermediate if:

(A) The product of the recycling process is a commodity that meets widely recognized commodity standards and specifications (e.g., commodity specification grades for common metals), or

(B) The hazardous secondary materials being recycled are returned to the original process or processes from which they were generated to be reused (e.g., closed loop recycling).

(~~3~~iii) ~~In making a determination that a hazardous secondary material is legitimately recycled, persons must evaluate all factors and consider legitimacy as a whole. If, after careful evaluation of these other considerations, one or both of the factors are not met, then this fact may be an indication that the material is not legitimately recycled. However, the factors in this paragraph do not have to be~~

~~met for the recycling to be considered legitimate. In evaluating the extent to which these factors are met and in determining whether a process that does not meet one or both of these factors is still legitimate, persons can consider the protectiveness of the storage methods,~~ If the product of the recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate per paragraph (a)(4)(i) or (ii) of this section, the recycling still may be shown to be legitimate, if it meets the following specified requirements. The person performing the recycling must conduct the necessary assessment and prepare documentation showing why the recycling is, in fact, still legitimate. The recycling can be shown to be legitimate based on lack of exposure from toxics in the product, lack of the bioavailability of the toxics in the product, ~~and~~ or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk. The documentation must include a certification statement that the recycling is legitimate and must be maintained on-site for three years after the recycling operation has ceased. The person performing the recycling must notify the Regional Administrator of this activity using EPA Form 8700–12.

Tables in the IIS-RA (F)

The Board has assembled tables in the IIS-RA (F) that list deviations from the federal amendments included in this rulemaking and numerous corrections and amendments that are not based on current federal amendments. Available as a separate document posted on the webpage for this docket R16-7 proceeding on the Board's website (www.ipcb.state.il.us), the IIS-RA (F) supplements this opinion. The contents of the tables in the IIS-RA (F) are described as follows:

Table 1 lists the several corrections that USEPA has recommended or suggested based on primacy review of the Illinois hazardous waste rules. Table 1 indicates the deficiency noted by USEPA and the Board's response to each deficiency noted. Some of the responses indicate no change was made because USEPA erred. Some of the responses attempt to explain the historical context and/or origin of the deficiency.

Table 2 lists a number of federal amendments that the Board has not made in this docket. Table 2 gives a brief explanation why the Board has not made each.

Table 3 lists and describes deviations made in the proposal for public comment from the verbatim text of the federal amendments that underlie this proceeding.

Table 4 lists corrections and clarifications that the Board made in the base text involved in this proposal. The amendments listed in Table 4 are not directly derived from the federal amendments that underlie this proceeding, although the Board has included corrections made at the request of USEPA in Table 4.

Table 5 lists the differences between the text of the rules as proposed by the Board on March 3, 2016 and as adopted today.

Table 6 lists suggested revisions to the rules proposed on March 3, 2016 that the Board declined in final adoption.