

1 ILLINOIS POLLUTION CONTROL BOARD
2 IN THE MATTER OF:)
)
3 PROPOSED 35 ILL. ADM. CODE) R 26-17
SUBTITLE K: RECYCLABLE,) (Rulemaking - Land)
4 RECLAIMABLE, OR REUSEABLE)
WASTES, CHAPTER I POLLUTION)
5 CONTROL BOARD, PART 1220)
MANAGEMENT OF USED EV BATTERIES)

6

7

8 HEARING
March 19, 2026
9 9:00 a.m.
2520 West Iles Avenue
10 Springfield, Illinois
and
11 555 W. Monroe Street
Chicago, Illinois

12 BOARD MEMBERS PRESENT
(Springfield)
13 Angel Tin
Michael Mankowski
14 (Chicago)
Jennifer Van Wie
15 Michelle Gibson

16 BOARD STAFF
(Chicago)
17 Anand Rao
Essence Brown
18 Daniel Pauley
Vanessa Horton

19

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24

1 HEARING OFFICER:

2 MS. NERISSA DIAZ MOISAN

3

APPEARANCES:

4 MARIE TIPSORD, IPCB General Counsel

5 TREVOR D. DELL'AQUILA, IEPA

NICK SAN DIEGO, IEPA

6 MIKE BRITE, IEPA

7

ALSO PRESENT:

8 VISHNU SRINIVASARAGHAVAN, IEPA

JONATHAN C. EASTVOLD, DCEO

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1 9:04 a.m.

2 PROCEEDINGS

3 HEARING OFFICER MOISAN: We are on
4 the record. Good morning and welcome to this
5 Illinois Pollution Control Board hearing. My
6 name is Nerissa Diaz Moisan, and I am the hearing
7 officer for the Illinois Pollution Control Board,
8 also known as IPCB or the Board, in this
9 rulemaking proceeding.

10 This is the first public hearing in
11 the matter of proposed 35 Illinois Administrative
12 Code Subtitle K: Recyclable, Reclaimable, or
13 Reusable Wastes: Chapter I: Pollution Control
14 Board, Part 1220: Management of Used EV
15 Batteries. The Board docket number for this
16 rulemaking is R-26-17.

17 To get started, I will briefly go
18 through three preliminary items: Board
19 introductions, the procedural history to date,
20 and housekeeping, including the order in which we
21 plan to proceed.

22 First, Board introductions: With me
23 in Springfield are Board Member Angela Tin, the
24 Board's lead member for this docket, and Board

1 Member Michael Mankowski, as well as our general
2 counsel, Marie Tipsord.

3 Also present today from the Board, in
4 attendance in Chicago are Board Member Jennifer
5 Van Wie, and Chief Environmental Scientist Anand
6 Rao, and Environmental Scientist Essence Brown.

7 Additional Board staff are also in
8 the audience.

9 Second, the procedural history: The
10 Illinois Environmental Protection Agency, also
11 known as IEPA or Agency, filed this rulemaking
12 proposal with the Board on January 2, 2026, which
13 the Board accepted for hearing by order.

14 In an order on January 29, 2026, the
15 hearing officer scheduled two hearings.

16 By February 1, 2026, hearing notices
17 were published in newspapers in the Springfield
18 and Chicago areas.

19 In the January 29, 2026 order,
20 participants intending to testify at this hearing
21 were directed to prefile their testimony and
22 related exhibits no later than Tuesday, February
23 17, 2026.

24 On that date, the Board received

1 prefiled testimony on behalf of the IEPA from
2 Vishnu Srinivasaraghavan.

3 MR. SRINIVASARAGHAVAN: You got it.

4 HEARING OFFICER MOISAN: Okay. Thank
5 you. Sorry.

6 No other participant pre-filed
7 testimony.

8 The January 29th hearing officer
9 order also directed participants to prefile
10 questions by Tuesday March 3, 2026.

11 In a hearing officer order on that
12 date, the Board issued questions.

13 No other participants prefiled
14 questions.

15 The Board posted all of these
16 documents to its Clerk's Office On-Line or COOL,
17 under this docket number R 26-17 as they were
18 filed.

19 Third is housekeeping. This hearing
20 is governed by the Board's procedural rules.
21 Under Section 102.426 of the procedural rules,
22 all information that is relevant, not repetitive,
23 and not privileged will be admitted into the
24 record.

1 The purpose of this hearing is to
2 build a complete administrative record for the
3 Board's consideration of the proposed rulemaking.

4 Please note that any questions posed
5 today by the Board and its staff are intended
6 solely to help develop a clear and complete
7 record for the Board's decision. They do not
8 reflect any determination or judgment on the
9 proposal, the testimony, or any other matter.

10 This proceeding is being recorded by
11 a court reporter, and a transcript will be made
12 part of the official record.

13 For the sake of the court reporter,
14 please speak clearly and avoid speaking at the
15 same time as another person, so that a clear
16 transcript can be produced.

17 For those attending by
18 videoconference, please say your name each time
19 before speaking so the court reporter can
20 identify you. If you have a question, please say
21 this is "your name" for a question and wait to be
22 recognized before speaking.

23 We will begin by swearing in the
24 witness who submitted prefiled testimony.

1 Section 102.424(f) of the Board's procedural
2 rules provides that pre-filed testimony will be
3 entered into the record as if read; however, the
4 witness may begin with a brief introduction or
5 summary if they wish.

6 We will then proceed with prefiled
7 questions and any related follow-up.

8 A recess is anticipated at
9 approximately 10:45 a.m., for the Board meeting,
10 with the hearing expected to resume at
11 approximately 11:30 a.m.

12 Afterward, we will determine whether
13 any person who did not prefile testimony wishes
14 to testify today. Under Section 102.424(f),
15 testimony not prefiled may be presented today if
16 time allows and it will not prejudice others;
17 otherwise it may be submitted afterwards as
18 public comment.

19 There will also be an opportunity for
20 any participant to offer testimony or comment on
21 the Board's request that the Department of
22 Commerce and Economic Opportunity perform an
23 economic impact study of the proposal.

24 As time allows before adjournment, we

1 will determine whether anyone wishes to offer a
2 public comment.

3 Please use the sign-in sheet located
4 by the door and indicate whether you intend to
5 give public comment on what topic. When called,
6 state and spell your name for the record before
7 speaking.

8 Are there any questions before we
9 begin?

10 Hearing none, we will now proceed by
11 swearing in the first witness and placing their
12 prefiled testimony into the record.

13 Is the Agency ready to swear in its
14 witness?

15 MR. DELL'AQUILA: Yes.

16 HEARING OFFICER MOISAN: Thank you.
17 Will the representative for the Agency please
18 introduce yourself for the record.

19 MR. SRINIVASARAGHAAN: Vishnu
20 Srinivasaraghavan, Materials Management and
21 Compliance Section.

22 HEARING OFFICER MOISAN: Thank you.
23 Would the court reporter please swear in the
24 witness.

1 (Witness sworn.)

2 VISHNU SRINIVASARAGHAVAN,
3 having first been duly sworn, testifies as
4 follows:

5 HEARING OFFICER MOISAN: Does the
6 IEPA wish to offer a brief summary or
7 introduction?

8 MR. DELL'AQUILA: No.

9 MR. SRINIVASARAGHAVAN: No.

10 HEARING OFFICER MOISAN: If the
11 witness is ready, we'll proceed with questions.

12 MR. DELL'AQUILA: I can offer
13 something. So the Illinois Environmental --
14 sorry. Again this is Trevor Dell'Aquila,
15 assistant counsel for the Illinois Environmental
16 Protection Agency.

17 This morning prior to the hearing,
18 the Illinois EPA did file responses just to have
19 a record available, which includes our responses
20 to all the questions included in the March 6,
21 2026, Board Order.

22 So we have this available. I served
23 it via email so if you would like, you have that
24 available to you, and those include our responses

1 for the questions that were posed prior to this
2 hearing.

3 MS. TIPSORD: Excuse me. Did you
4 bring a copy of that with you?

5 MR. DELL'AQUILA: I don't have a
6 printed copy, but I can get some if you'd like.

7 MS. TIPSORD: Did you serve the
8 hearing officer?

9 MR. DELL'AQUILA: Yes.

10 MS. TIPSORD: Can you forward that to
11 me and I'll go print off copies --

12 MR. DELL'AQUILA: Sure.

13 MS. TIPSORD: -- so that the Board
14 members have it when you're answering questions.
15 In the future prefiling before the hearing needs
16 to be hand delivered. That's in our procedural
17 rules. You can't just -- doesn't -- you know --
18 because our clerk isn't going to be able to get
19 that posted to COOL in a timely manner.

20 I mean because she doesn't start
21 until 8:30. So yeah, if you'll forward that to
22 me, I'll get copies for Mike and Angela and you.

23 MS. BROWN: Can you email it to me?

24 HEARING OFFICER MOISAN: One second,

1 everybody. All right. Thank you for your
2 patience, everyone. Marie is going to get those
3 printed, and I have it now pulled up.

4 Just for the record, on March 19,
5 2026, IEPA filed written responses to these
6 questions. Those responses will be included in
7 the record.

8 Are there any objections to the
9 inclusion or consideration of those materials
10 before we proceed?

11 Okay. Hearing none, we will proceed.

12 All right. Anything else before we
13 get started with testimony?

14 MR. DELL'AQUILA: No.

15 HEARING OFFICER MOISAN: Okay. If
16 the witness is ready, we'll proceed with
17 questions.

18 Prefiled questions are entered into
19 the record as if read, with the Board's prefiled
20 questions as Hearing Exhibit 2.

21 I'm sorry. I should have asked.
22 Does anyone need a break to review these prefiled
23 answers, or are we ready to continue?

24 Yes, Anand.

1 MR. RAO: I have not received the
2 email.

3 MR. PAULEY: I just sent it to Anand.
4 Sorry.

5 HEARING OFFICER MOISAN: Okay. Once
6 you receive the email, are you ready to continue,
7 or do you want to take a quick break on it?

8 MR. RAO: I have not received that.

9 MS. VAN WIE: I just got it.

10 MR. RAO: Yeah, I just got it. Quick
11 question.

12 HEARING OFFICER MOISAN: Yes.

13 MR. RAO: Is the Agency still going
14 to answer on the record, or are we supposed to
15 look at the response and then follow up or how --

16 MS. VAN WIE: I think we'll have
17 to --

18 MR. RAO: We'll have to.

19 MS. VAN WIE: -- go through question
20 by question since we didn't have time to review
21 it before the hearing.

22 HEARING OFFICER MOISAN: Okay. Thank
23 you.

24 All right. As mentioned earlier --

1 okay. I don't know if I said this already or
2 not, but as mentioned earlier, the prefiled
3 testimony is entered into the record as read.
4 Mr. Srinivasaraghavan's prefiled testimony will
5 be marked as Hearing Exhibit 1.

6 I did say that. Sorry. So sorry.

7 All right. They've been entered as
8 Exhibit 2.

9 The Board also notes receipt of the
10 Agency's prefiled answers, which are marked as
11 Hearing Exhibit 3.

12 We will proceed in order through the
13 questions. Where questions contain subparts,
14 they may be addressed together as appropriate.

15 Question 1. In its rulemaking
16 proposal, the IEPA incorporates by reference
17 National Fire Protection Association (NFPA) 51B,
18 "Standard for Fire Prevention During Welding,
19 Cutting, and Other Hot Work," 2014 Edition,
20 explicitly stating that no later amendments or
21 editions are incorporated. NFPA 51B has since
22 been updated to the 2024 edition. Our records
23 indicate that the Board currently has the 2014
24 standard (incorporated in 35 Ill. Adm. Code

1 848.105 - Used Tire Rule).

2 Subpart (a). Can IEPA explain why it
3 did not use the updated 2024 edition?

4 Subpart (b). Should the Board
5 incorporate the 2024 edition rather than the 2014
6 edition;

7 And subpart (c). If so, can IEPA
8 provide three copies of the updated standard?

9 MR. SRINIVASARAGHAVAN: I have
10 nothing to add on top of what's in the response.

11 MR. DELL'AQUILA: Read your
12 responses.

13 MR. SRINIVASARAGHAVAN: I do have to
14 read. Okay. So response 1, subpart (a). The
15 Illinois EPA did not use the updated 2024 edition
16 of NFPA 51B as the updates in the 2024 edition do
17 not include significant changes for the purposes
18 of used EV battery storage.

19 Subpart (b). The Illinois EPA has no
20 objection to incorporating the 2024 edition.

21 Subpart (c). The Illinois EPA does
22 not currently have the licensing rights to
23 provide copies of the 2024 edition of NFPA 51B.

24 HEARING OFFICER MOISAN: Okay.

1 MR. RAO: Follow-up.

2 HEARING OFFICER MOISAN: Go ahead.

3 MR. RAO: Would it be possible for
4 the Agency to purchase the copyright for the 2024
5 edition and submit it to the Board?

6 MR. SRINIVASARAGHAVAN: We are
7 looking into that. We will take that into
8 consideration.

9 MR. RAO: Okay. Thank you.

10 HEARING OFFICER MOISAN: Question 2.
11 A review of the IEPA's Technical Support Document
12 states that IEPA used NFPA 855 as a guideline for
13 the proposed regulations.

14 Subpart (a). Can IEPA provide a copy
15 of NFPA 855?

16 Subpart (b). Can IEPA explain why
17 this document was not incorporated by reference?

18 MR. SRINIVASARAGHAVAN: The response
19 to subpart (a). The Illinois EPA does not
20 currently have the licensing rights to provide a
21 copy of NFPA 855.

22 Subpart (b). NFPA 855 was utilized
23 strictly as a guideline (not incorporated by
24 reference) because the IEPA adapted its

1 large-format battery energy storage system safety
2 principles - room spacing, fire-rated
3 separations, pile limits, ceiling clearances,
4 detection, suppression, and explosion protection
5 concepts - specifically for inert (non-charging)
6 used EV batteries with an added margin of safety.
7 Note that NFPA 855 is directed towards actively
8 charging and discharging electric storage systems
9 and, while similar in terms of battery size and
10 risk, is therefore not an exact equivalent for
11 used EV batteries. Only NFPA 51B (2014) is
12 expressly incorporated for hot-work fire
13 prevention. (See Sections 1220.120 and
14 1220.205(a)(5).

15 HEARING OFFICER MOISAN: Any
16 follow-up?

17 Question 3. Please explain how
18 IEPA's reliance on existing fire safety concepts
19 and industry standards (including NFPA guidance)
20 in Part 1220 is intended to minimize regulatory
21 burden by aligning environmental protection
22 requirements with already-established fire codes
23 and practices, while still addressing the
24 environmental risks associated with used EV

1 battery fires.

2 MR. SRINIVASARAGHAVAN: The Illinois
3 EPA's usage of NFPA 855 as a guideline (and NFPA
4 51B as incorporated) deliberately aligns Part
5 1220 with established fire codes and industry
6 best practices so facilities already following
7 modern fire safety requirements face minimal new
8 burden. The proposed rules isolate fires to
9 single piles/ rooms via 900 square foot limits,
10 2- or 3-hour fire-rated walls, 2-foot ceiling
11 clearance, sprinklers, and air-aspirating smoke
12 detection - standard construction techniques
13 that prevent chain-reaction spread and give
14 firefighters time to respond to any fire or
15 explosion event. Proposed outdoor rules
16 (non-combustible enclosed containers,
17 10-feet/20-feet spacing, setbacks) do the same
18 without mandating novel technology. This
19 approach protects the environment from runoff
20 while letting businesses use commonly available
21 materials and systems.

22 HEARING OFFICER MOISAN: Okay.

23 Member Tin.

24 MS. TIN: This is Board Member Angela

1 Tin. As a follow-up to that question, the Office
2 of the State Fire Marshal submitted a response
3 and some comments as to what would be better
4 documents used for reference. Has the Agency had
5 an opportunity to review those documents, and
6 will it consider what the fire marshal's asked
7 for in their letter?

8 MR. SRINIVASARAGHAVAN: The Agency
9 has had a chance to review them initially, and we
10 are in the process of trying to review them and
11 see what we can incorporate.

12 MS. TIN: Thank you.

13 HEARING OFFICER MOISAN: Question 4.
14 What is the impact of the universal waste rules
15 on this proposal? Please identify any provisions
16 in Part 1220 that expressly defer to, conflict
17 with, or override existing hazardous or universal
18 waste requirements.

19 MR. SRINIVASARAGHAVAN: The Illinois
20 EPA views used EV batteries as a separate
21 category that should not be managed in the
22 universal waste stream. Given the number of
23 high-profile battery fires originating from EV
24 batteries or energy storage systems utilizing

1 batteries that are similar in size and energy
2 density as EV's, the Illinois EPA views
3 management and storage of these batteries
4 necessitating a separate set of rules for
5 effective fire safety.

6 The current universal waste
7 regulations define batteries as a much broader
8 category than these proposed regulations, which
9 are only directed toward used EV batteries.
10 These regulations propose additional requirements
11 specifically on the storage of used EV batteries,
12 but do not otherwise conflict with the universal
13 weight management regulations for batteries.

14 HEARING OFFICER MOISAN: Okay.
15 Question 5. Are there any current or updated
16 guidance or publications from U.S. EPA regarding
17 storage of lithium-ion EV batteries? If so,
18 comment on whether the proposed rules are
19 consistent with the U.S. EPA guidance.

20 MR. SRINIVASARAGHAVAN: The U.S. EPA
21 has a website outlining best management practices
22 for end of life lithium batteries at the link
23 that is written in the record. This was utilized
24 as a source; however, the guidance does not go

1 into detail on building fire safe infrastructure
2 to store used EV batteries.

3 MS. TIN: Question here is has the
4 Agency had any conversation with U.S. EPA
5 regarding these proposed rules?

6 MR. SRINIVASARAGHAVAN: Not at this
7 time, but we are planning on doing that.

8 MS. TIPSORD: Just for the record,
9 the answers that were submitted this morning have
10 been docketed in COOL and are available on the
11 Board's website in the R-26-17 docket.

12 MS. VAN WIE: Thank you, Marie.

13 MR. RAO: Follow-up.

14 HEARING OFFICER MOISAN: Please go
15 ahead.

16 MR. RAO: Do these rules when enacted
17 by the Board need to be approved by the U.S. EPA,
18 or are they just state?

19 MR. SRINIVASARAGHAVAN: They're just
20 state rules.

21 MR. RAO: Thank you.

22 HEARING OFFICER MOISAN: Question 6.

23 MS. TIN: I have a follow-up.

24 HEARING OFFICER MOISAN: Oh, sorry.

1 MS. TIN: Are they just state rules
2 because there's no overlying SIP, state
3 implementation plan, requirement, or are they
4 just state rules because they're outside of the
5 SIP? What is the reason why?

6 MR. SRINIVASARAGHAVAN: I would have
7 to look at that and get back -- and comment back.

8 MS. TIN: Okay.

9 MR. SRINIVASARAGHAVAN: Yeah.

10 HEARING OFFICER MOISAN: Question 6.
11 The proposed Part 1220 provides management
12 standards for used EV battery storage sites,
13 covering storage, fire, and explosion prevention,
14 contingency planning, emergency response,
15 recordkeeping, reporting, and financial
16 assurance. Section 22.23f(d) of the
17 Environmental Protection Act (415 ILCS
18 5/22.23f(d) authorizes rules for such sites and
19 specifies certain elements. The proposal
20 differentiates between sites storing less than
21 5,000 kilograms, site at or above this threshold,
22 transporters, and batteries returned to refuse or
23 recycling. For provisions of Part 1220 that
24 reference the 5,000 kilogram threshold:

1 Subsection (a). Can IEPA confirm
2 whether the threshold language "more than 5,000
3 kilograms" should -- there's a typo -- should be
4 included instead be "5,000 kilograms or more" to
5 match the statutory language in Section 22.23f?

6 Subsection (b). Can IEPA clarify
7 which categories of operators; (for example,
8 automotive recyclers, scrapyards, transporters)
9 are subject to these threshold-specific
10 provisions?

11 Subsection (c). Can IEPA clarify
12 whether any threshold specific provisions differ
13 based on battery type, condition, or storage
14 method (indoor vs. outdoor), and if so, which
15 provisions?

16 Subsection (d). Are there any
17 provisions within Sections 1220.205, 1220.210(d),
18 1220.215(c), 1220.220, or Subpart E that apply to
19 all sites regardless of the 5,000 kilograms
20 threshold, and could IEPA identify those for
21 clarity?

22 MR. SRINIVASARAGHAVAN: Our response
23 to subpart (a): Yes, the Illinois EPA can
24 confirm that the language should match the

1 statutory language in Section 22.23f.

2 Subpart (b). Pursuant to 415 ILCS
3 5/22.23f(b)(3), the owner or operator of a
4 battery storage site where 5,000 kilograms or
5 more of used batteries are stored at any one time
6 must be "an automotive parts recycler as defined
7 in Section 1-105.3 of the Illinois Vehicle Code
8 and licensed under Section 5-301 of the Illinois
9 Vehicle Code.

10 Subpart (c). The proposed
11 regulations do not differentiate between battery
12 chemistries. The only thresholds are whether the
13 used EV battery is a fully assembled EV battery
14 and the storage accumulation amounts. All other
15 provisions of subpart B and F are consistent
16 regardless of the above conditions.

17 Subpart (d). Subpart B base
18 management standards (Sections 1220.200 and
19 1220.205) apply to any site containing one or
20 more used EV batteries, except for the provisions
21 contained in Section 1220.205(a)(6). Subpart F,
22 Financial Assurance also applies to any site
23 containing one or more used EV batteries.

24 MS. TIN: I think these questions

1 that I'm asking you may be asked in other
2 sections, but as we're speaking on them I'm going
3 to go ahead and ask the question.

4 Number 1 is: These recyclers
5 possibly could get batteries from other sources
6 such as electric bikes or other sources. They
7 may just get a pile of batteries other than
8 automotive. So are they outside of this rule,
9 and do they have to follow any of the
10 requirements for fire safety, storage or
11 financial assurance, or anything? What happens
12 to these units that are outside the program?

13 MR. SRINIVASARAGHAVAN: As written,
14 this is specifically for EV batteries, but that
15 is something we would be happy to consider given
16 the fire safety issue.

17 MS. TIN: Okay. The next question I
18 have is since these proposed regulations do not
19 differentiate between battery chemistry, the fire
20 protection or the fire activities would
21 differentiate between the types of batteries and
22 battery chemistries. So how are you going to
23 reconcile the two?

24 MR. SRINIVASARAGHAVAN: So these --

1 these -- the rules as they were written were for
2 best management practices on fire safety. From
3 investigations and research we've seen so far
4 that's based on different chemistries and maybe
5 the chemistries that were most prone to fire.

6 So we're going on -- on the error of
7 safety, but that is something we would -- we are
8 going to continue to review and see if there are
9 changes we can make, especially given comments
10 from our staff and others.

11 MS. TIN: And then this last
12 question, may be in another -- another question
13 phrased somewhere else, but there's the
14 requirement or the option to cap the anodes and
15 the cathodes so there's no sparking or anything.
16 Is any of those requirements in these proposed
17 rules?

18 MR. SRINIVASARAGHAVAN: That is
19 actually in the rules.

20 MS. TIN: Okay. Thank you.

21 HEARING OFFICER MOISAN: Question 7.
22 Section 22.23f(d) directs IEPA to propose rules
23 governing used EV battery storage sites. Within
24 that mandate, please explain how IEPA determined

1 the appropriate level of prescriptiveness and
2 uniformity in Part 1220, including the use of
3 statewide standards rather than performance-based
4 or site-specific approaches.

5 MR. SRINIVASARAGHAVAN: The Illinois
6 EPA determined statewide standards best suited
7 this rulemaking rather than performance-based or
8 site- specific approaches due to the unique
9 nature and risk profile of used EV batteries.
10 Because of the chemistries of EV batteries
11 alongside the potential for damage or other
12 defects resulting from vehicle accidents or other
13 causes, any individual used EV battery has a risk
14 of spontaneous combustion or explosion. Due to
15 this risk, statewide standards were deemed as the
16 best option for preventing harmful releases from
17 both used EV battery fires or explosion and fire
18 spread in facilities that store other wastes or
19 are near -- or are located near facilities that
20 store wastes that would result in harmful
21 environmental releases in the case of a fire. In
22 addition, being based on NFPA standards, the
23 proposed rules lend themselves to statewide
24 application rather than a performance-based or

1 site-specific approach.

2 HEARING OFFICER MOISAN: If you don't
3 mind, the speaker is right here so if you could
4 speak up a little bit.

5 MR. SRINIVASARAGHAVAN: Oh, sure.

6 HEARING OFFICER MOISAN: Sorry. Any
7 follow-up?

8 Okay. Question 8. The proposed
9 rules in Part 1220 include reporting,
10 recordkeeping, registration, contingency
11 planning, and financial assurance requirements,
12 especially for sites storing 5,000 kilograms or
13 more of used EV batteries. IEPA has stated that
14 the rules are technically feasible and
15 economically reasonable and that commonly
16 available materials and systems can be used to
17 comply.

18 Subsection (a). Please provide an
19 estimate of the number of small businesses that
20 would be subject to the proposed rules. A "small
21 business" means one with "fewer than 50 full-time
22 employees or less than \$4,000,000 in gross annual
23 sales." 1 Ill. Adm. Code 100.410(a)(14).

24 Subsection(b). Please provide

1 estimates of the costs of compliance for various
2 types and sizes of used EV battery storage sites,
3 including: Costs to acquire and maintain
4 financial assurance; construction of two- and
5 three-hour fire-rated barriers; installation or
6 upgrade sprinkler systems and smoke/thermal
7 detection systems; and purchase and maintenance
8 of outdoor storage containers.

9 Include both one-time and ongoing
10 operational costs and state all assumptions used
11 to develop these estimates.

12 Subsection (c). Please provide an
13 estimate of the economic impact of the proposed
14 rules specifically on small businesses, including
15 the items listed in subsection (b).

16 Subsection (d). Please address
17 whether any professional skills are necessary for
18 compliance with the proposed rules.

19 And subsection (e). Please identify
20 any less intrusive or less costly alternative
21 methods considered to achieve the purposes of
22 Section 22.23f of the Act and the proposed rules,
23 and provide a rationale for why alternatives were
24 or were not adopted.

1 MR. SRINIVASARAGHAVAN: Subpart (a),
2 the response: The Agency is not aware of any
3 statewide tally of small businesses storing EV
4 batteries, and that therefore would be subject to
5 the proposed rules.

6 Subpart (b). Maintaining financial
7 assurance is a site specific cost, as risk for
8 any given site differs from the risks at other
9 sites. Financial assurance cost would depend on
10 the amount of batteries stored at a storage site
11 and the availability of removal contractors in
12 the area, and the availability of recyclers or
13 storage/disposal sites for the battery removal.

14 Compliance costs for storage sites
15 are also highly site specific, based on the
16 amount of batteries being stored, the intended
17 size of room construction, the intended size of
18 containers to be used, if a new sprinkler system
19 is required or if an existing system is being
20 expanded, and if new smoke detection systems are
21 needed.

22 Subpart (c). The cost for small
23 businesses would be the same as for any facility
24 storing used EV batteries, which is dependent on

1 the amount of batteries being stored and other
2 site specific dependencies (i.e., if a new
3 sprinkler system must be installed or if an
4 existing one is being expanded).

5 Subpart (d). The proposed
6 regulations do not establish any requirements for
7 professional qualifications, certifications, or
8 other skills. However, the Office of the
9 Illinois State Fire Marshal's Public Comment
10 includes input on establishing certain
11 requirements that would necessitate professional
12 skills.

13 Such proposed requirements include
14 hazard/deflagration analysis to be prepared by a
15 Fire Protection Engineer or registered design
16 specialist with experience in fire protection
17 engineering or a similarly qualified individual,
18 requiring a sprinkler system to be designed and
19 installed according to an analysis done by a Fire
20 Protection Engineer or similarly qualified
21 individual, and including or consulting with a
22 Fire Protection Engineer or similarly qualified
23 individual in developing fire safety plans as
24 described in Section 1220.210(d). See Office of

1 the State Fire Marshal's Public Comments, PC#1,
2 pages 3-5.

3 Subpart (e). The Illinois EPA
4 considered several options for used EV battery
5 storage methods, including allowing storage piles
6 to be separated by open air and covered
7 alternatives to storage containers. However,
8 such alternatives were not adopted as the risk of
9 fire or fire spread greatly increases when more
10 batteries are stored without any means of fire
11 containment. The Illinois EPA felt the best
12 approach was to base the proposed rules on
13 appropriate NFPA standards and best management
14 practices regarding fire prevention, as they have
15 already been crafted by experts in the field and
16 are what any person wanting to safely store EV
17 batteries should already be following so should
18 not increase costs.

19 MS. TIN: Does the Agency intend or
20 propose in the future once this program gets
21 under way to collect the information about the
22 number of small businesses, the costs estimates,
23 what is a good range, what is the low end, what
24 is the high end? Does the Agency intend to

1 collect this information?

2 MR. SRINIVASARAGHAVAN: The Agency
3 will have that information just from the nature
4 of companies applying for financial assurance and
5 that we will be analyzing that for those
6 purchases.

7 HEARING OFFICER MOISAN: Question 9.
8 Please describe the methodology, assumptions, and
9 data sources IEPA used to conclude that the
10 proposed rules do not impose significant costs or
11 undue burdens on regulated entities.

12 MR. SRINIVASARAGHAVAN: The Illinois
13 EPA believes that the battery fires -- I'm sorry.

14 Safety was the number one priority
15 when crafting these regulations. The Illinois
16 EPA believes that battery fires and resulting
17 environmental impacts create a financial burden
18 to communities and emergency response personnel
19 which are more expensive than construction and
20 other costs associated with compliance.
21 Additionally, the burden of the costs shifts from
22 the facility to the community to achieve cleanup
23 which then has to be litigated for reimbursement.
24 The Illinois EPA developed these regulations to

1 be met by owners and operators utilizing readily
2 available commercial products.

3 HEARING OFFICER MOISAN: Question 10.
4 Please identify any data gaps or uncertainties
5 IEPA is aware of regarding used EV battery fire
6 behavior, storage risks, or mitigation
7 effectiveness, and explain how those
8 uncertainties were addressed in developing Part
9 1220.

10 MR. SRINIVASARAGHAVAN: The Illinois
11 EPA acknowledges every EV battery's chemistry is
12 slightly different and used EV batteries add many
13 additional variables based on condition and
14 chemistry. Because the Illinois EPA has no
15 instrument to know the state of any given used EV
16 battery, these rules are intended to be fully
17 protective in any situation when used EV
18 batteries are being stored. Therefore, the
19 Illinois EPA's highest priorities in drafting the
20 proposed regulations were fire prevention and
21 safety. The storage requirements requiring
22 fire-rated rooms or containers along with spacing
23 requirements prioritize isolation of a possible
24 fire to a smaller accumulation of batteries to

1 ensure the fire fighting crews can arrive on
2 scene before the potential fire spreads to the
3 rest of the facility.

4 HEARING OFFICER MOISAN: Question 11.
5 For sites storing 5,000 kilograms or more of used
6 EV batteries, can IEPA provide the technical
7 basis for the fire safety plans and runoff
8 capture provisions, including how these measures
9 prevent off-site environmental impacts from
10 potential battery fires?

11 MR. SRINIVASARAGHAVAN: For sites
12 storing 5,000 kilograms or more, the fire safety
13 plan (Section 1220.210(d)) and runoff capture
14 requirement (Section 1220.215(b)(A)) are adapted
15 directly from NFPA 855-adapted principles.
16 Indoor design isolates each 900 sq. ft. pile in
17 fire-rated rooms so a single thermal runaway
18 cannot cascade; outdoor container spacing and
19 concrete pads prevent spread; and runoff capture
20 prevents contaminated firefighting water from
21 reaching surface and groundwater. The Illinois
22 EPA required these measures to minimize the
23 potential impact to the environment from
24 potentially heavy metals and other harmful

1 compounds (such as PFAS) leaching from the
2 batteries or the firefighting liquids and foams.

3 HEARING OFFICER MOISAN: Question

4 12 --

5 MS. TIN: Can we go back a minute.

6 HEARING OFFICER MOISAN: Yes.

7 MS. TIN: I think this is the first
8 time I heard PFAS mentioned. I've heard heavy
9 metals, you know, but the PFAS. How do you
10 intend to control the PFAS? Would that be part
11 of the monitoring or --

12 MR. SRINIVASARAGHAVAN: So that's --
13 our intent is to try to minimize off-site impact
14 in the first place. There are -- we recognize
15 that there are still some firefighting foams and
16 other chemicals that still utilize PFAS, and
17 firefighting crews are still allowed to use those
18 in emergency situations.

19 So our intent to try to capture
20 runoff is to try to minimize off-site impacts.

21 MS. TIN: Would that be through
22 sampling or --

23 MR. SRINIVASARAGHAVAN: It would be
24 through sampling.

1 MS. TIN: Would that be required from
2 the owner?

3 MR. SRINIVASARAGHAVAN: It would be
4 required as part of the cleanup plan, yes.

5 MS. TIN: Thank you.

6 HEARING OFFICER MOISAN: Question 12.
7 Use of RCRA, Universal Waste, and Hazardous Waste
8 Considerations:

9 Subpart (a). Did IEPA consider
10 regulating the storage of used EV batteries under
11 the federal Resource Conservation and Recovery
12 Act (RCRA) hazardous waste rules, or under the
13 universal waste provisions.

14 Subsection (b). If so, what factors
15 led IEPA to develop the current state-specific
16 rules instead?

17 Subsection (c). Are lithium-ion
18 batteries on the market today likely considered
19 hazardous waste when disposed of due to
20 ignitability (D001) and reactivity (D003)
21 characteristics?

22 And subsection (d). If so, do the
23 proposed rules address when the hazardous waste
24 rules become applicable to used EV batteries

1 regulated under Part 1220?

2 MR. SRINIVASARAGHAVAN: Subpart (a).

3 Yes, the Illinois EPA considered regulating the
4 storage of used EV batteries under the universal
5 waste provisions.

6 Subpart (b). Due to the
7 recyclability of precious metals within used EV
8 batteries, the volume of precious metals within
9 EV batteries, the fact that 415 ILCS 5/22.23f
10 provides specific requirement for EV batteries,
11 and in anticipation of future laws and
12 regulations on battery recycling or refurbishing,
13 Illinois EPA determined that EV batteries would
14 be best regulated under their own rules.

15 Subpart (c). Under the definitions
16 in 40 CFR 261.21 and 261.23, lithium-ion
17 batteries are likely considered hazardous waste
18 due to ignitability and reactivity
19 characteristics. U.S. EPA's Lithium-Ion Battery
20 Recycling Frequently Asked Questions web page
21 also states most lithium-ion secondary batteries
22 (which includes rechargeable EV batteries) are
23 likely to be hazardous waste due to ignitability
24 and reactivity. See the included link.

1 Subpart (d). Part 1220 does not
2 explicitly address when the hazardous waste rules
3 become applicable to used EV batteries.

4 HEARING OFFICER MOISAN: Yes, Member
5 Tin.

6 MS. TIN: Question 4 you said that
7 the --

8 MS. VAN WIE: Wait. Wait. Wait. We
9 have a question.

10 MR. RAO: I have a question in
11 follow-up. Are we still on question 12?

12 HEARING OFFICER MOISAN: Yes, we are.

13 MR. RAO: Member Tin, are you asking
14 a question or can I ask a follow-up?

15 HEARING OFFICER MOISAN: She was
16 getting ready to ask a follow-up, I believe.

17 MR. RAO: Oh, okay. Yeah. We didn't
18 hear that.

19 MS. TIN: Question 4 said that the
20 Illinois EPA views EV batteries as a separate
21 category that should not be managed in the
22 universal waste stream, but then on this question
23 you said that the Illinois EPA considered
24 regulating the storage of used EV batteries under

1 the universal waste provisions.

2 Can you differentiate the difference
3 between the two?

4 MR. SRINIVASARAGHAVAN: We, we
5 considered regulating under that, but we still
6 want separate rules.

7 MS. TIN: So is it separate from the
8 federal definition of universal waste?

9 MR. SRINIVASARAGHAVAN: Yes.

10 MS. TIN: So the State is having
11 their own definition of universal waste separate
12 from the U.S. EPA?

13 MR. SRINIVASARAGHAVAN: In this case,
14 yes.

15 MR. DELL'AQUILA: No.

16 MR. SRINIVASARAGHAVAN: Or no, not in
17 this case. Sorry.

18 MS. TIN: Would that require EPA
19 approval?

20 MR. SAN DIEGO: If I can clarify.

21 MS. TIN: Okay.

22 MR. SAN DIEGO: So we considered
23 regulating under the universal waste rules but
24 decided not to and just went straight to pursuant

1 to the authority under the Act as a separate
2 standalone. So we're not trying to intersect
3 with the universal waste --

4 MS. TIN: So it's not going to be
5 under that umbrella?

6 MR. SAN DIEGO: Correct. Right.
7 Right.

8 MS. TIN: Okay. Thank you.

9 HEARING OFFICER MOISAN: Oh,
10 apologies. We need to swear you in. Court
11 Reporter, can you swear him in.

12 (Nick San Diego was sworn in by the
13 court reporter.)

14 MR. SAN DIEGO: Although to clarify,
15 I'm providing just clarification. We can square
16 it away in the record because I'm not testifying
17 on behalf of the Agency. I'm trying to clarify
18 the question.

19 HEARING OFFICER MOISAN: Anand, did
20 you have a follow-up?

21 MR. RAO: Follow-up on response --
22 your response to subpart (d). Do you think that
23 rules should address when these owners that are
24 operators to pick up subject to hazardous waste

1 rule?

2 COURT REPORTER: I'm sorry. Can you
3 repeat your question?

4 HEARING OFFICER MOISAN: Can you
5 repeat your question?

6 MR. RAO: Pardon me?

7 HEARING OFFICER MOISAN: Can you
8 repeat the question?

9 MR. RAO: My question is shouldn't
10 the rules address when the owner or operator of
11 EV battery would become subject to hazardous
12 waste rules? Should the rules address that
13 issue?

14 MR. SRINIVASARAGHAVAN: We, we can
15 take a look at that and get back to you.

16 MR. RAO: Thank you.

17 HEARING OFFICER MOISAN: Question 13.
18 Under Section 22.23f(c) of the Act, "the owner or
19 operator of each battery storage site in
20 operation prior to February 1, 2026, at which
21 5,000 kilograms or more of used batteries are
22 stored at any one time, must register with the
23 Agency prior to February 1, 2026, and each
24 February 1 thereafter." 415 ILCS 5/22.23f(c).

1 For a battery storage site that "comes into
2 operation after February 1, 2026," the owner or
3 operator "shall register with the Agency prior to
4 commencing operation." The statute further
5 requires that registration be "on forms and in a
6 format prescribed by the Agency" and "include, at
7 a minimum, information regarding the following:

8 (1) the name and address of the owner
9 and operator of the battery storage site; (2) a
10 description of the operations conducted at the
11 battery storage site; (3) the weight or volume of
12 whole or partially used batteries received at the
13 battery storage site over the past calendar year;
14 and (4) the weight or volume of whole or partial
15 used batteries at the battery storage site at the
16 end of the calendar year.

17 Subpart (a). Please provide copies
18 of all the registrations IEPA has received.
19 Also, please provide a blank registration form
20 (or prototype if still being developed) in both
21 PDF and Word.

22 Subpart (b). Will IEPA accept
23 registrations electronically or only on paper?
24 At which address or addresses may registrations

1 be submitted?

2 MR. SRINIVASARAGHAVAN: Subpart (a).
3 The Illinois EPA has not received any
4 registrations at this time. The Illinois EPA is
5 in the process of revising its existing forms and
6 creating forms pursuant to this part. The
7 Illinois EPA can provide prototype forms for this
8 Part once drafts are complete.

9 Subpart (b). The Illinois EPA will
10 accept registrations electronically and on paper.
11 The Illinois EPA intends to build a portal for
12 all electronic submissions. However, until the
13 portal is available, all registrations will have
14 to be submitted on paper. All registrations must
15 be submitted to Illinois EPA headquarters at:
16 Illinois EPA, Materials Management and Compliance
17 Section, 2520 W. Iles Avenue, P.O. Box 19276,
18 Springfield, Illinois 62704-9276.

19 MS. TIN: Will there be any -- has
20 there been any outreach or, you know, comments
21 exchanged back and forth with the regulated
22 community through seminars or conferences?

23 MR. SRINIVASARAGHAVAN: Not through
24 seminars or conferences, but we have reached out

1 to some of the big automotive recyclers and their
2 corporate entities with the proposed rules, and
3 our next step is to actually go through the
4 Secretary of State database of automotive
5 recyclers and try to do another outreach.

6 MR. MANKOWSKI: Question. Board
7 Member Michael Mankowski. Are you aware of any
8 recyclers right now that have over 5,000
9 kilograms or more on-site?

10 MR. SRINIVASARAGHAVAN: We are not
11 aware of any at this point.

12 MR. MANKOWSKI: Okay.

13 MR. RAO: I have a follow-up. Would
14 it be possible for the Agency to provide any
15 drafts under the proposed parts prior to the
16 second hearing?

17 MR. SRINIVASARAGHAVAN: We can
18 certainly look at that. We are still developing
19 the form, but we can certainly look at providing
20 draft forms.

21 MR. RAO: Thank you.

22 HEARING OFFICER MOISAN: Question 14.
23 For facilities storing used EV batteries prior to
24 the effective date of Part 1220, please explain

1 whether any compliance grace period or phased
2 implementation is anticipated for fire safety,
3 storage, or financial assurance requirements?

4 MR. SRINIVASARAGHAVAN: While Part
5 1220 does not explicitly provide for any
6 compliance grace period or phased implementation,
7 the Illinois EPA anticipates that a grace period
8 or phased implementation would be made in
9 consideration of a facility's size, amount of
10 batteries stored prior to the effective date, and
11 amount of batteries the facility intends to store
12 at its peak volume. If the Board suggests that a
13 grace period or phased implementation be included
14 by rule in Part 1220, the Illinois EPA would
15 defer to a period the Board deems appropriate.

16 HEARING OFFICER MOISAN: Question 15.
17 Did IEPA evaluate the cumulative regulatory
18 burden imposed on used EV battery storage sites
19 when Part 1220 is combined with existing federal,
20 state, and local regulatory requirements,
21 including but not limited to hazardous waste
22 regulations, fire codes, local zoning or building
23 codes, and transportation regulations governing
24 lithium batteries? If so, please describe that

1 evaluation.

2 MR. SRINIVASARAGHAVAN: Yes. The
3 Illinois EPA reviewed existing regulatory
4 requirements and determined that these proposed
5 regulations only introduce requirements for
6 storage methods of used EV batteries, and are not
7 otherwise expected to impact any existing burdens
8 under federal, state, or local regulatory
9 requirements. Additionally, as the proposed
10 rules are based on NFPA standards and best
11 management practices, no additional regulatory
12 burden is anticipated.

13 HEARING OFFICER MOISAN: Question 16.
14 Please explain whether the Agency evaluated fire
15 risk, environmental risk, or operational
16 differences above and below the 5,000-kilogram
17 threshold, and whether the proposed requirements
18 are calibrated to those differences.

19 MR. SRINIVASARAGHAVAN: The Illinois
20 EPA did conduct these analyses. Battery fires
21 around the nation suggest accumulation amounts of
22 batteries certainly played a factor in the
23 magnitude of fires. However, the Illinois EPA
24 also found evidence suggesting that EV batteries,

1 especially lithium-based chemistries (the
2 majority of EV battery chemistries), were
3 inherently more flammable with improper
4 management. EV battery fires often spread from
5 single batteries which catch other items in the
6 fire path leading to larger fires. It is for
7 this reason that the proposed rules prioritize
8 proper storage of used EV batteries in specially
9 constructed fire-rated rooms isolated from other
10 batteries or flammable objects and
11 infrastructure.

12 HEARING OFFICER MOISAN: Question 17.
13 Please clarify whether Part 1220 applies to
14 temporary or incidental storage of used EV
15 batteries, such as short-term staging during
16 vehicle recovery, towing, or transport, and how
17 IEPA intends to distinguish regulated storage
18 sites from incidental handling locations.

19 MR. SRINIVASARAGHAVAN: Part 1220
20 does not currently differentiate between
21 temporary or incidental storage and permanent
22 storage. However, the Illinois EPA notes that
23 used EV battery storage poses a risk of battery
24 fire or explosion regardless of the duration of

1 storage.

2 HEARING OFFICER MOISAN: Question 18.
3 Please explain the technical and safety basis for
4 excluding facilities that store disassembled EV
5 battery components from Part 1220, given that
6 individual battery modules or cells may still
7 pose fire and explosion risks.

8 MR. SRINIVASARAGHAVAN: These rules
9 are specifically intended to govern storage
10 facilities. In other words, these rules are
11 meant to regulate the safe storage of used EV
12 batteries that are waiting to be recycled. These
13 rules are not meant to regulate recycling
14 facilities actively disassembling batteries.
15 Therefore, recycling activity is viewed as a
16 separate operation from a storage site regulated
17 by these rules. However, any recycling facility
18 that stores used EV batteries that have not been
19 recycled or are in the process of being recycled
20 are required to store those used EV batteries
21 pursuant to Part 1220.

22 MS. TIN: A follow-up question here.
23 What if -- what if the owner/operator does some
24 disassembling at the storage facility, how would

1 the rules impact on it?

2 MR. SRINIVASARAGHAVAN: We would --
3 we're still reviewing that, but from our
4 perspective so far the storage area would be
5 separated, separate from the disassembly area.
6 So where you're storing the battery Part 1220
7 would apply.

8 MS. TIN: And what would apply where
9 there's disassembling of the battery?

10 MR. SRINIVASARAGHAVAN: These rules
11 don't get into that.

12 HEARING OFFICER MOISAN: Question 19.
13 Please provide responses to all five questions on
14 the "State Mandates Act Questionnaire" (1 Ill.
15 Adm. Code 1220 Exhibit A.) This form is attached
16 as Exhibit 1 to this Attachment A.

17 MR. SRINIVASARAGHAVAN: A completed
18 State Mandates Act Questionnaire is attached to
19 this document as Exhibit 1.

20 MS. TIPSORD: And for the record this
21 document is the document that you filed at 9:00
22 this morning, correct?

23 MR. SRINIVASARAGHAVAN: Correct.

24 MS. TIPSORD: I don't know that we've

1 got it, the email yet, just to be aware for the
2 record when we look back, we can find it.

3 HEARING OFFICER MOISAN: Thank you.

4 MS. VAN WIE: Can we take just a
5 minute so we can take a brief look at that
6 questionnaire?

7 HEARING OFFICER MOISAN: Sure. Would
8 you like a break or just take a minute?

9 MS. VAN WIE: No, I think just a
10 quick break.

11 HEARING OFFICER MOISAN: Sure.

12 MS. VAN WIE: I'm good.

13 HEARING OFFICER MOISAN: Anyone else
14 need a little more time?

15 MS. TIN: Just one minute.

16 HEARING OFFICER MOISAN: Sure.

17 MS. TIN: Thank you.

18 HEARING OFFICER MOISAN: Question 20.
19 Please provide responses to questions 1(d) and 2
20 on the "Agency Analysis of Economic and Budgetary
21 Effects of Proposed Rulemaking" form (1 Ill. Adm.
22 Code 220 Exhibit B). The form is attached as
23 Exhibit 2 to this attachment A.

24 MR. SRINIVASARAGHAVAN: A completed

1 Agency Analysis of Economic and Budgetary Effects
2 of Proposed Rulemaking form containing responses
3 to questions 1(d) and 2 is attached to this
4 document as Exhibit 2.

5 HEARING OFFICER MOISAN: We'll take
6 another few minutes just to review those
7 responses as well. Thank you.

8 Member Tin, do you have question?

9 MS. TIN: Yes. And I'm sorry, I
10 looked at 2 as 1 and 1 as 2, but is it okay if I
11 ask a question on Exhibit 1?

12 HEARING OFFICER MOISAN: Okay. That
13 would be question 19.

14 MS. TIN: Yes. You know, you have
15 the rulemaking affect any of the following:
16 Question 1, and you've checked municipality,
17 county, township, other unit of local government,
18 but did you -- you did not check school district
19 or community college district.

20 The reason I'm asking is that schools
21 and community districts are to have a lot of
22 automotive classes and they may get into the
23 point where they're replacing batteries,
24 recycling batteries, studying batteries, EV

1 batteries, and so I wondered if is there a
2 possibility that these other, you know,
3 educational facilities may be storing some
4 batteries on the site?

5 MR. SRINIVASARAGHAVAN: That is
6 certainly something we will take into
7 consideration. Appreciate your bringing that up.

8 MS. TIN: Thank you. Sorry for
9 flipping forms.

10 MR. SRINIVASARAGHAVAN: No. No.
11 You're fine.

12 MS. VAN WIE: I have a follow-up on
13 your small business analysis. Earlier you had
14 testified that you didn't think there would be a
15 negative impact on small businesses in one of our
16 earlier questions, but yet here there may be a
17 negative impact. Could you explain is it just
18 because what we asked in the earlier question or
19 is there actually going to be a negative impact
20 on businesses that might be storing these used EV
21 batteries?

22 MR. SRINIVASARAGHAVAN: Could you
23 tell me which question specifically you're
24 referring to --

1 MS. VAN WIE: You would ask me that.

2 MR. SRINIVASARAGHAVAN: -- on the
3 form, right?

4 HEARING OFFICER MOISAN: Question 2
5 on the form she's referencing, but are you asking
6 about the earlier question as well?

7 MS. TIN: No, just that.

8 HEARING OFFICER MOISAN: Okay.

9 MR. SRINIVASARAGHAVAN: I can say it
10 was, it was the way that the -- for us the way
11 the earlier question was structured, but, you
12 know, in this specifically, I mean obviously a
13 small business will have to -- may incur costs
14 having to comply with the best management
15 practices that were prescribed in NFPA 855.

16 MS. VAN WIE: Okay. Thank you.

17 MR. SRINIVASARAGHAVAN: Yeah.

18 HEARING OFFICER MOISAN: Question 21.
19 Under Section 1220.100, please clarify whether
20 Part 1220 applies to used EV storage facilities
21 regulated under section 22.23f of the Act. If
22 so, would it be acceptable to the Agency if
23 Section 1220.100 begins with a sentence stating,
24 "This Part applies to used EV battery storage

1 sites regulated under Section 22.23f of Act" as
2 follows:

3 This Part applies to used EV battery
4 storage sites regulated under Section 22.23f of
5 the Environmental Protection Act, [415 ILCS
6 5/22.23f]. Section 22.23f specifies prohibitions
7 relative to the receipt, handling, storage, and
8 transfer of used electric vehicle EV batteries.
9 This Part establishes further requirements
10 related to the receipt, handling, storage, and
11 transfer of used electric vehicle batteries at
12 used EV battery storage sites. Despite any other
13 provision of this Part, this Part does not apply
14 to: a) New EV batteries being stored prior to
15 installation in an electronic -- or electric
16 vehicle; b) Batteries installed in an electric
17 vehicle that have not yet been removed; and c)
18 Used EV batteries that have been returned to
19 reuse or returned to the economic mainstream in
20 the form of raw materials or products.

21 MR. SRINIVASARAGHAVAN: Yes, Part
22 1220 applies to used EV battery storage sites
23 under Section 22.23f of the Act. The Illinois
24 EPA does not oppose the suggested addition to

1 Section 1220.100.

2 HEARING OFFICER MOISAN: Question 22.

3 In Section 1220.110(b), several state regulations
4 are listed as examples of rules that may apply to
5 used EV storage sites. Are there any examples of
6 federal rules applicable to used EV battery
7 storage sites that may be included in this
8 section? If so, please provide citations to
9 those rules.

10 MR. SRINIVASARAGHAVAN: There are
11 currently no federal equivalents to these rules.
12 Therefore, the Illinois EPA relied on guidance
13 from NFPA to craft these regulations to maximize
14 fire safety. However, batteries, used EV
15 batteries, are subject to federal universal waste
16 management standards contained within 40 CFR 273.
17 In addition, U.S. EPA's Lithium-Ion Battery
18 Recycling Frequently Asked Questions web page
19 also provides additional suggestions beyond the
20 universal waste standards for storage, which
21 these proposed rules cover. See the Frequently
22 Asked Questions at the link.

23 MS. TIN: Question here. Again the
24 universal waste rules are mentioned, but these

1 you mentioned -- you stated that these are
2 separate from the universal waste rules. So my
3 question is are they part of the universal waste
4 rules or not?

5 MR. SRINIVASARAGHAVAN: They are not.

6 MS. TIN: But you said that they were
7 subject to universal waste management standards
8 in accordance with 40 CFR 273.

9 MR. SRINIVASARAGHAVAN: Our rules are
10 specifically that, but this is something that we
11 can review further and get back to you as well to
12 ensure consistency.

13 MS. TIN: Okay. The next question I
14 have is are there any requirements from the
15 Illinois Department of Transportation especially
16 in regards to the movement or the transfer
17 between the operator and the recycler?

18 MR. SRINIVASARAGHAVAN: Yes, there
19 are. There are. Given the characteristics of
20 these EV batteries there are special
21 considerations that will need to be followed and
22 that will be taken into account when we are
23 calculating financial assurance for these sites.

24 MS. TIPSORD: Can you give the

1 citation to the cite?

2 MR. SRINIVASARAGHAVAN: I don't have
3 those in front of me, but I can get those for you.

4 MS. TIPSORD: Thank you.

5 MR. SRINIVASARAGHAVAN: Yeah.

6 HEARING OFFICER MOISAN: Question 23.

7 In the proposed definition of "Used EV battery"
8 under Section 1220.115, please clarify what the
9 phrase "rather than installed in an electric
10 vehicle" means. Please comment on whether the
11 following changes to the last sentence of the
12 proposed definition reflect the proposed intent:

13 This term includes uninstalled EV
14 batteries that are sent by the manufacturer or
15 another person for recycling and EV batteries
16 removed from an electric vehicle at the battery
17 storage site.

18 MR. SRINIVASARAGHAVAN: As Part 1220
19 is only intended to cover EV batteries that are
20 removed from vehicles, the above-referenced
21 phrase is intended to exclude used EV batteries
22 sent to a recycling facility while still
23 connected to a vehicle. The Illinois EPA agrees
24 that the above changes reflect the proposed

1 intent. Above changes reflect the proposed
2 intent.

3 HEARING OFFICER MOISAN: Question 24.
4 Section 1220.125. Please explain the basis for
5 using the density factor of 17 kilograms per
6 cubic foot to estimate the weight of an
7 accumulation of used EV batteries under
8 subsection (b). If the density factor is derived
9 from any published report, standard or document,
10 please provide a citation.

11 Subsection (b). Please clarify
12 whether an accumulation of used EV batteries is
13 the same as a used EV battery storage pile. If
14 not, should the rules include a definition of
15 "used EV battery storage pile"?

16 MR. SRINIVASARAGHAVAN: Subpart (a).
17 The 17 kilograms per cubic foot estimate is based
18 on the weight and dimensions of the batteries
19 contained within the most popular and most sold
20 EV on the market, which at the time of this
21 rulemaking is Tesla. The Illinois EPA used the
22 largest capacity battery available in a Tesla
23 vehicle for the density factor, as the highest
24 capacity battery poses the largest risk due to

1 the increased amount of battery cells.

2 Subpart (b). The two terms are the
3 same for the purposes of Part 1220. The Illinois
4 EPA does not oppose adding a definition for "used
5 EV battery storage pile."

6 HEARING OFFICER MOISAN: Member Tin.

7 MS. TIN: Density means a number of
8 things. I think you're referring to physical
9 density --

10 MR. SRINIVASARAGHAVAN: Uh-huh.

11 MS. TIN: -- but there is also energy
12 density and recycling density. So are you mainly
13 talking about physical density?

14 MR. SRINIVASARAGHAVAN: For this
15 specific portion, yes, we are talking physical
16 density.

17 HEARING OFFICER MOISAN: Okay. Does
18 this physical density pertain to the cells or the
19 entire battery pack?

20 MR. SRINIVASARAGHAVAN: The entire
21 battery pack.

22 MS. TIN: Okay. And does this
23 density apply to car batteries, truck batteries,
24 or semi batteries? Which type of battery does

1 this density --

2 MR. SRINIVASARAGHAVAN: So this
3 density is specifically used as a calculation
4 method if the site does not have the means to
5 properly weigh batteries as they're coming in.
6 So this is a worst case scenario to be able to
7 estimate your weight of an accumulation of
8 batteries if you could not measure them properly,
9 if you could not weigh them properly. So we used
10 the worst case scenario calculation to be able to
11 estimate that weight.

12 MS. TIN: So trucks and semi, you
13 know, lightweight trucks and semi batteries would
14 be included in this and, of course, they would
15 reach the minimal threshold quicker?

16 MR. SRINIVASARAGHAVAN: No. No. If
17 it's a -- if it's a semi or truck battery, I
18 think we would, we would probably have to go back
19 and review that to see if we have to revise that,
20 but for a semi or truck battery, this would not
21 apply.

22 HEARING OFFICER MOISAN: But it's not
23 clarified that this does not apply -- it infers
24 that all batteries are included in this program.

1 MR. SRINIVASARAGHAVAN: Yeah, we
2 acknowledge that. So we're going to take that
3 back and review that.

4 MS. TIN: And then will you also
5 clarify that it's the battery pack and not the
6 cells?

7 MR. SRINIVASARAGHAVAN: Correct.
8 Yeah. We can take that into consideration as
9 well.

10 MS. TIN: Thank you.

11 MEMBER MANKOWSKI: Michael Mankowski
12 again. Even though Tesla may be the most popular
13 and most sold, are there any other EVs on the
14 market that may have a larger density battery
15 pack, you know, like a GM, Tesla, like a Hummer
16 and things like that? Has the Agency looked into
17 that to see if there could be depending on what
18 the source is, if there could be batteries that,
19 you know, would be more than that 17 kilograms
20 per cubic foot?

21 MR. SRINIVASARAGHAVAN: We did a
22 preliminary analysis, and we're willing to dive
23 deeper into this to be able to fine tune this,
24 yes.

1 MEMBER MANKOWSKI: Okay.

2 HEARING OFFICER MOISAN: Question 25.
3 Proposed Section 1220.200 states that subpart (b)
4 applies to the owner and operator of "any battery
5 storage site that contains one or more used EV
6 batteries." The statutory definitions of
7 "battery storage site" and "storage" use the
8 plural "Batteries." Citation 415 ILCS
9 5/22/23f(a), and the proposed Section 1220.115
10 definitions repeat this. The definition of
11 "owner" and "operator" use the defined term
12 "battery storage site," and the "storage"
13 definition uses the word "accumulation."

14 Is it IEPA's intent that the base
15 management standards of Subpart (b) would apply
16 to a site containing only a single used EV
17 battery that has been removed from a vehicle? If
18 so, please specify which Subpart (b) provisions
19 would apply.

20 Is it IEPA's intent that the
21 requirements of Subpart F (Financial Assurance)
22 would apply to a site containing only a single
23 used EV battery that has been removed from a
24 vehicle? If so, please specify which Subpart F

1 provisions would apply.

2 MR. SRINIVASARAGHAVAN: So response
3 to the first subpart. Yes, Subpart B's base
4 standards apply to a site that with even a single
5 used EV battery. (See Section 1220.200: "any
6 battery storage site that contains one or more
7 used EV batteries").

8 Second subpart. As written, all
9 Subpart F language applies.

10 HEARING OFFICER MOISAN: Member Tin.

11 MR. RAO: I've got a follow-up.

12 HEARING OFFICER MOISAN: Yes. And
13 Member Tin will go first and then Mr. Rao please.

14 MS. TIN: Would there be a
15 distinction in that the storage and handling
16 would apply but not the notification? Is there a
17 distinction between one and, you know, more than
18 one?

19 MR. SRINIVASARAGHAVAN: As written,
20 no, but we can -- that's something we can
21 definitely consider.

22 MS. TIN: Thank you.

23 MR. RAO: Regarding your answer to
24 the question as to financial assurance, has the

1 Agency contacted any financial institutions to
2 find out if there is readily available financial
3 estimate instruments for these EV storage of
4 batteries specifically?

5 MR. SRINIVASARAGHAVAN: The Agency
6 has not reached out, but that is something we can
7 take into consideration.

8 MR. RAO: You said take into
9 consideration. Can you also find out how much it
10 would cost to, you know, provide financial
11 assurance for that 5,000 kilograms of used EV
12 batteries?

13 MR. SRINIVASARAGHAVAN: We will take
14 that into consideration, yes.

15 MR. RAO: Thank you.

16 MEMBER MANKOWSKI: I had one question
17 about in 24. Did we answer (b), or did I just
18 miss it? What about the battery storage pile? I
19 know we talked about (a), but I didn't know if
20 we -- did we get the answer to (b) before you --

21 HEARING OFFICER MOISAN: Yes, he did.

22 MEMBER MANKOWSKI: Okay. I just
23 wanted to make sure.

24 HEARING OFFICER MOISAN: Thank you.

1 Question 26. If the threshold is 5,000 kilograms
2 of used batteries at any one time, when does the
3 threshold trigger (instantly, monthly)? If the
4 weight changes or decreases, do the requirements
5 end, or is this a "once-in" provision?

6 MR. SRINIVASARAGHAVAN: The threshold
7 is 5,000 kilograms or more "at any one time."
8 Once triggered, the requirements (registration,
9 contingency plan, records) remain in effect for
10 that calendar year.

11 MS. TIN: So if you say for that
12 calendar year, then is it possible that the
13 second year they would be out?

14 MR. SRINIVASARAGHAVAN: Yes.

15 HEARING OFFICER MOISAN: And is that
16 timeframe already in the rules as written?

17 MR. SRINIVASARAGHAVAN: No. No.

18 MS. TIN: Would it be that February
19 date? Would that be the calendar year?

20 MR. SRINIVASARAGHAVAN: Most likely,
21 but we're, we're still considering that.

22 HEARING OFFICER MOISAN: Question 27.
23 Section 1220.205. Subsection (a). This section
24 lists management standards under subsections

1 (a)(1) through (a)(9), but there is no subsection
2 (b). Would it be acceptable to the Agency if
3 subsections (a)(1) through (a)(9) are renumbered
4 as subsections (a) through (i) with a preamble
5 stating, "Owners and operators of any battery
6 storage site who store used EV batteries must
7 comply with the following requirements"?

8 Subsection (b). The proposed
9 subsection 1220.205(a)(9) requires an analysis of
10 "the potential for a deflagration involving the
11 off-gassing of flammable gases during a thermal
12 runaway."

13 Subsection (i). Please explain what
14 is entailed in conducting this analysis.

15 Subsection (ii). Does the Agency
16 expect all used EV battery storage sites to
17 conduct this analysis?

18 Subpart (iii). If so, comment on
19 whether owners or operators must hire a fire
20 safety expert or consultant to conduct the
21 analysis.

22 Subsection (iv). Does the Agency
23 have any information about the cost of conducting
24 the analysis required under this subsection?

1 And subsection (v). Please identify
2 whether any written guidance, checklist, or
3 Agency criteria exists (or will be developed) to
4 evaluate compliance with subsection (a)(9).

5 And finally subsection C. Proposed
6 subsection (a)(9) also requires the installation
7 of explosion protection meeting industry
8 standards if the potential for a deflagration
9 exists. Please describe the specific industry
10 standards being referred to in this subsection.
11 Should the rules include citations to applicable
12 industry standards?

13 MR. SRINIVASARAGHAVAN: Subsection
14 (a). The Illinois EPA has no objection.

15 Subsection (b) (i). An analysis of
16 the battery chemistry and its potential to
17 deflagrate potentially harmful gases in a thermal
18 runaway event.

19 (b) (ii). Yes, but a preliminary
20 analysis of the chemistry should allow the owner
21 or operator to make an assessment on the risk of
22 deflagration.

23 (b) (iii). If the owner or operator
24 does not have the expertise in-house, they will

1 have to hire an expert.

2 (b) (iv). No.

3 (b) (v). The Illinois EPA is not
4 currently developing any written guidance for
5 subsection (a)(9).

6 Subpart (c). While Part 1220 does
7 not attempt to limit subsection (a)(9) to any
8 single safety standard, some examples of industry
9 standards are those contained in NFPA 855 or the
10 Occupational Safety and Health Administration's
11 (OSHA) standards for combustible dust, which
12 poses a risk for any multi-use facilities that
13 also store used EV batteries. Should OSHA adopt
14 any battery specific standards, those would also
15 be applicable.

16 MS. TIN: Question here is so you
17 said that should OSHA adopt any standards, so
18 that means you've looked into the OSHA
19 requirements and there are no OSHA requirements
20 at this time?

21 MR. SRINIVASARAGHAVAN: Our
22 preliminary analysis does not reveal that, but we
23 are diving deeper to ensure that we've done a
24 thorough analysis.

1 MS. TIN: Thank you. Thank you for
2 mentioning OSHA.

3 MR. RAO: I have a follow-up here.
4 In response to (c) you mentioned the NFPA 855 or
5 OSHA standards, you know, whichever standards.
6 Should the rules at least refer to NFPA 855 as
7 some sort of guidance for conducting this
8 analysis that you have on this section which is
9 205?

10 MR. SRINIVASARAGHAVAN: That's
11 something we can, we can certainly use. There is
12 a future standard coming so we can definitely
13 take that into consideration.

14 MR. RAO: Okay. Okay.

15 MS. HORTON: I have one question.
16 27(b) (v). You state that the Illinois EPA is
17 not currently developing any written guidance for
18 subsection 1220.2005 (a)(9). Under -- what are
19 you looking for to comply with under that
20 subsection?

21 HEARING OFFICER MOISAN: Sorry. Just
22 a quick minute. Oh, never mind. The screen went
23 in and out. We can see now.

24 MS. HORTON: Should I repeat my

1 question?

2 MR. SRINIVASARAGHAVAN: Yes, could
3 you repeat that? I was pulling up (a)(9).

4 MS. HORTON: So I was asking what are
5 you looking for for compliance in that
6 subsection?

7 MR. SRINIVASARAGHAVAN: So the main
8 thing we are looking for is an analysis on
9 whether the batteries have a chance to explode or
10 deflagrate and that can be done based on the
11 chemistry, and we're just looking for someone
12 who's qualified to make that analysis.

13 MS. HORTON: Okay.

14 MS. TIN: The Agency is looking for
15 someone who's qualified. Who are you looking
16 for?

17 MR. SRINIVASARAGHAVAN: The rules
18 requiring --

19 MS. TIN: Okay.

20 MR. SRINIVASARAGHAVAN: Yeah. Yeah.

21 MS. VAN WIE: Okay. Yeah, someone
22 who's qualified. By that do you mean someone who
23 is part of the storage facility, and how did you
24 define whether or not they're qualified to make

1 the analysis I guess is my question.

2 MR. SRINIVASARAGHAVAN: We can, we
3 can definitely take this back to review and just,
4 you know, really hash this out, but essentially
5 this analysis requires knowledge of chemistry
6 and, you know, battery chemistry specifically and
7 its reactions. So we're looking for someone who
8 can make that analysis with confidence.

9 MS. VAN WIE: And also, if you do
10 find OSHA standards under (c), I know we talked
11 about the NFPA could decide, but could you also
12 cross-reference any OSHA standards that might be
13 applicable?

14 MR. SRINIVASARAGHAVAN: Yes, we can
15 certainly do that.

16 MR. RAO: Would it be possible for
17 the Agency to provide some examples of how this
18 analysis is done into the record so we get an
19 idea what specifics are involved?

20 MR. SRINIVASARAGHAVAN: We can
21 certainly look at that and try to get back.

22 MR. RAO: Okay.

23 MS. TIN: As another follow-up, would
24 the qualified person possibly be the owner or

1 operator? Could it be the owner or operator?
2 Could it be their health and safety operator?
3 Could it be someone that's licensed in fire
4 protection? Are you looking for an engineer?
5 Are you looking for a geologist? Can you
6 quantify or qualify what is an expert?

7 MR. SRINIVASARAGHAVAN: So, yeah,
8 subpart (iii) we do answer that, and if its
9 expertise is in-house, then that's -- that can be
10 used.

11 MS. TIN: And you will determine if
12 the expert is an expert or they will determine?

13 MR. SRINIVASARAGHAVAN: Well, they
14 will submit a report, and then we will have to
15 review whether we accept that or not, yes.

16 MS. TIN: Okay.

17 HEARING OFFICER MOISAN: Question 28.
18 The proposed rules do not explicitly address
19 storage of used EV batteries in single-family
20 homes or other residential buildings. Used EV
21 batteries can cause serious fires if damaged or
22 improperly stored. The combined presence of
23 smaller lithium batteries and a used EV battery
24 could increase fire risk, as a fire starting from

1 a small device could propagate to a large EV
2 battery if stored nearby. Given these risks,
3 should the rules explicitly allow storage of used
4 EV batteries in residential settings, or should
5 they generically prohibit such storage?

6 MR. SRINIVASARAGHAVAN: The rule
7 already prohibits storage in single-family homes
8 or other residential buildings. See Section
9 1220.210(b)(3).

10 MS. TIN: My question here is all
11 with using two negatives. No battery shall be
12 stored within the building unless the building is
13 not a single-family home. So no battery is
14 stored unless a building is not. So that's where
15 the question came up to the Board is, you know,
16 is there another way to say this instead of using
17 two negatives?

18 MR. SRINIVASARAGHAVAN: We, we
19 appreciate you bringing that up, and hearing you
20 read it out loud we definitely see that. So we
21 can -- we'll take that into consideration to
22 revise that to make it more clear.

23 MS. TIN: Thank you.

24 HEARING OFFICER MOISAN: Question 29.

1 Because batteries may have different chemistries,
2 should the system specify delivery of fire
3 suppression and heat dissipation agents suitable
4 for the EV battery chemistry being stored?

5 MR. SRINIVASARAGHAVAN: The Illinois
6 EPA's research concluded that water remains one
7 of the most effective agents for preventing
8 additional thermal runaway. Therefore, the
9 Illinois EPA focused on fire prevention methods
10 related to spacing and construction using
11 currently available material and methods.

12 HEARING OFFICER MOISAN: Question 30
13 -- I'm sorry. Member Tin, you have a question
14 for 29?

15 MS. TIN: There's other -- there may
16 be other ways for fire suppression and heat
17 dissipation other than water. I think that's
18 what you're saying.

19 MR. SRINIVASARAGHAVAN: Uh-huh.

20 MS. TIN: There are some new methods
21 for soy foam. There's other types of foams.
22 There are blankets. So has all those other
23 methods been considered in this rulemaking?

24 MR. SRINIVASARAGHAVAN: So these

1 rules don't actually prevent those other methods
2 from being employed. So the spacing requirements
3 and the room requirements are the main
4 requirements to ensure that any potential fire to
5 be isolated from the rest of the facility, but we
6 are still leaving the door open for those
7 technological advances and in fact for most EV or
8 actually lithium-based water is the worst you can
9 do --

10 MS. TIN: Yes.

11 MR. SRINIVASARAGHAVAN: -- because
12 the oxygen's accelerating the reaction, and so we
13 are, we are definitely open to having those other
14 methods come through.

15 MEMBER MANKOWSKI: I mean if --
16 follow-up question on that. I mean if I'm
17 reading the (v) properly I mean it requires them
18 to be EV batteries to be stored in a room with
19 automatic sprinkler system. I mean if you had a
20 battery technology that wasn't consistent with a
21 water sprinkler system, would that be an issue?

22 MR. SRINIVASARAGHAVAN: No.

23 MR. MANKOWSKI: No?

24 MR. SRINIVASARAGHAVAN: No. No.

1 Yeah. So we, we're open to operators proposing
2 different solutions.

3 MR. MANKOWSKI: But there's a "shall"
4 there that said they need to have the automatic
5 sprinkler system. How would that work if the
6 automatic sprinkler system inconsistent with the
7 batteries that were being stored in that area?

8 MR. SRINIVASARAGHAVAN: So we would
9 have to look at that case by case. The rules I
10 believe specifically states sprinkler system but
11 they don't specify water.

12 MEMBER MANKOWSKI: Okay.

13 MR. SRINIVASARAGHAVAN: So the
14 sprinkler can still spray something else.

15 MR. MANKOWSKI: Okay. Thank you for
16 that clarification.

17 MR. SRINIVASARAGHAVAN: Yeah.

18 MS. TIN: But don't they generally
19 spray water?

20 MR. SRINIVASARAGHAVAN: They
21 generally spray water, yes.

22 MS. TIN: And is there any
23 requirements or mechanisms for diking of the
24 area?

1 MR. SRINIVASARAGHAVAN: For we -- we
2 do have that for the accumulations of 5,000
3 kilograms or more, but it's something we can
4 consider for these other, you know, as a
5 universal rule. We can look at that as well.
6 And just I want to make another clarification,
7 you know, a sprinkler system that still sprays
8 water is not completely terrible either because
9 if the battery hasn't fully caught on fire, it is
10 one of the most effective ways to prevent thermal
11 runaway to control heat dissipation until fire
12 fighting crews can get out there.

13 HEARING OFFICER MOISAN: Question 29
14 asks should the system specify delivery of fire
15 suppression and heat dissipation. Your answer
16 says that you did conduct some research and that
17 you focused on prevention of that you did. Could
18 you answer should it specify anything else?

19 MR. SRINIVASARAGHAVAN: We can look
20 into that. I think there's two ways to look at
21 it. We don't also want to limit technological
22 advancements and prescribe to potential operators
23 on exactly what they should be doing if there's
24 maybe a better solution out there.

1 HEARING OFFICER MOISAN: Thank you.

2 MS. TIN: Can you also specify the
3 difference between a fire suppression system that
4 an owner/operator may use as opposed to the fire
5 control system that the fire protection district
6 may use? I think we kind of touched on both
7 sides of it, you know, because the blankets and
8 stuff would be used by a fire department, while
9 the sprinkler may be used by the owner/operator.

10 MR. SRINIVASARAGHAVAN: Yeah. We can
11 definitely look at that, yes.

12 MS. TIN: Okay.

13 HEARING OFFICER MOISAN: Question 30.
14 Can IEPA clarify how the 2-foot-from-ceiling
15 storage height limit is intended to be applied?
16 Specifically: Subpart (a). Does the maximum
17 pile height vary based on the actual height of
18 the storage room?

19 Subsection (b). Are there any
20 minimum or standard room height assumptions?

21 Subsection (c). How does this
22 clearance ensure proper operation of fire
23 suppression systems and minimize fire spread
24 risks?

1 MR. SRINIVASARAGHAVAN: Subpart (a).
2 The 2-foot clearance requirement is regardless of
3 room height. As a note, OSFM, Office of State
4 Fire Marshal's, suggests in its public comment a
5 far more restrictive limit of one pallet height
6 requirements. See Office of the State Fire
7 Marshal's Public Comments, PC#1, page 3.

8 Subpart (b). The Illinois EPA did
9 not want to limit designs by making any minimum
10 design assumptions. When drafting these rules,
11 the Illinois EPA considered most warehouse spaces
12 to have 20-foot ceiling heights. Any facilities
13 of such a size would still have to construct
14 fully enclosing fire barriers on the sides and
15 ceiling of a storage pile pursuant to Section
16 1220.210(c).

17 Subpart (c). The required clearance
18 ensures sprinklers and detection systems have
19 enough space to activate properly and prevent
20 fire spread to structural elements.

21 HEARING OFFICER MOISAN: Member Van
22 Wie.

23 MS. VAN WIE: I have a question
24 regarding the subsection (a) question. Is the

1 Illinois EPA considering modifying the language
2 to take into consideration the OSFM comments?

3 MR. SRINIVASARAGHAVAN: We are
4 looking into OSFM's comments and how much of that
5 can be applied. The one pallet restriction that
6 they had, which was part of their fire manual
7 7-112 actually referenced the one pallet height
8 for specifically damaged and defective batteries,
9 and so it was an extra measure of safety
10 specifically for those batteries, and the Agency
11 recognizes that some EV batteries are going to be
12 damaged and defective, but that's not going to be
13 representative of every single battery, and so
14 the Agency's looking, is essentially reviewing
15 this and trying to strike a balance between
16 safety and not being too restrictive to business.

17 MS. TIN: Question here is are there
18 other rules that require limitations based upon
19 ceiling height rather than storage of the units
20 themselves? That's my first question.

21 MR. SRINIVASARAGHAVAN: We, we
22 certainly can look into that a bit more and just
23 see if there's other references, yeah.

24 MS. TIN: Could you not achieve the

1 same thing by requiring a pallet height and also
2 requiring the clearance while operation of the
3 fire suppression rather than just saying that you
4 could build it as high as you want as long as it
5 doesn't hit the ceiling?

6 MR. SRINIVASARAGHAVAN: I guess I'm
7 not fully following exactly.

8 MS. TIN: The ceiling height would
9 vary -- you know, there's different rooms. You
10 mention 20-foot ceiling.

11 MR. SRINIVASARAGHAVAN: Uh-huh.

12 MS. TIN: Some have 10-foot ceiling.

13 MR. SRINIVASARAGHAVAN: Uh-huh.

14 MS. TIN: Smaller facilities and so
15 your limitation is based upon the ceiling height
16 and the operation of the fire suppressants.
17 Couldn't you just mandate that the fire
18 suppressants be operable at the same time
19 maintain a pallet height somewhat according to
20 what the fire marshal asked for? I did not like
21 the arbitrary ceiling height.

22 MR. SRINIVASARAGHAVAN: And I see
23 your point. That's something we can look into.
24 The only caveat that I would say with that

1 methodology would be that if we're limiting the
2 height especially to one pallet, then depending
3 on, you know, how many batteries a potential site
4 could store, that's going to be a larger
5 footprint laterally, which, you know, a lot of
6 times with a taller warehouse being able to stack
7 them gives you more economy of scales in terms of
8 bringing more batteries in there, and there's
9 also other technology such as open rack space or
10 open rack systems that have fire suppression
11 systems built into each shelf of the rack, which
12 once again if an operator were to propose this is
13 the way they're going to stack their batteries,
14 that would most likely be acceptable.

15 MS. TIN: What about the scenario
16 where the ceiling height is incredibly high, and
17 then you're stacking them and there's a
18 possibility of, you know, falling over or
19 anything like that?

20 MR. SRINIVASARAGHAVAN: And that's
21 something we would have to look at on a
22 case-by-case basis. The OSFM comments also
23 commented on batteries being stacked too high
24 because that's going to be difficult for

1 firefighters to actually go and try to put out
2 potential fires or thermal runaway events. And
3 so our preliminary analysis based on those
4 comments and what we've seen so far in the
5 industry would be most likely if you're going to
6 try to go higher, we would need some sort of
7 system that has a rack mounted, you know, fire
8 suppressant system or something along that to be
9 able to delay any fires from spreading.

10 MS. TIN: Perhaps your limitations
11 could be this or this or this, more of a tiered
12 approach as opposed to, to just based on ceiling
13 height.

14 MR. SRINIVASARAGHAVAN: Sure, and
15 that's something we can definitely look at, yes.

16 MS. TIN: Okay.

17 MR. SRINIVASARAGHAVAN: Thank you.

18 MR. RAO: May I ask?

19 MS. VAN WIE: Go ahead.

20 MR. RAO: In your response to Member
21 Tin's question you had mentioned that you would
22 look on a case-by-case basis. The question is
23 does the rule allow the Agency to do a
24 case-by-case analysis? Under what provision of

1 the rule will the Agency do that kind of
2 case-by-case evaluation?

3 MR. SRINIVASARAGHAVAN: From a fire
4 safety perspective we think it does, but it is
5 something that if we have to, you know, go back
6 and look at the rules to be able to allow that,
7 we can certainly do that.

8 MR. RAO: There is a registration
9 requirement. So would that be part of the
10 facility -- I'm just curious because this rule is
11 not set up for permitting but the Agency gets to
12 go and do case-by-case management. So if you can
13 take a look at that and see how that can be done.

14 MR. SRINIVASARAGHAVAN: Yeah, we can
15 certainly consider that. We're actually -- this
16 is not going to a formal permit process, and so,
17 you know, we would -- our number one
18 consideration in all of this would be fire
19 safety, and so there is still potential for our
20 field inspectors to go out if we have concerns,
21 but yes, your comments are noted and we will
22 certainly try to look at that to try to clarify
23 that, yes.

24 HEARING OFFICER MOISAN: Member Van

1 Wie.

2 MS. VAN WIE: I'm wondering if
3 there's anything in the tire regulations or RCRA
4 related to that type of storage that could be
5 helpful to input here because I think, you know,
6 there's similar concerns with those types of
7 accumulations as well. So has the Illinois EPA
8 looked at those, or could they look at those if
9 they have not?

10 MR. SRINIVASARAGHAVAN: Yes, we are
11 -- we are -- that's actually one of the
12 industries we're looking at the most given, given
13 the high profile fires and in fact a lot of our
14 financial assurance calculations are also being
15 pulled and modified from the tire -- the tire
16 side so that's something we're looking at. We
17 haven't fully finished our analysis with that
18 yet, but that is exactly where we're at.

19 MS. VAN WIE: I guess, but are you
20 looking at those specifically for the storage
21 like the height from the ceiling and that type of
22 stuff?

23 MR. SRINIVASARAGHAVAN: Yeah, we are,
24 we are considering some of that, yes.

1 MS. VAN WIE: Okay. Thank you.

2 MS. TIN: As the question was asked,
3 this is not a permitting, so most of your review
4 would be after the fact?

5 MR. SRINIVASARAGHAVAN: Correct.

6 MS. TIN: So these facilities would
7 probably be already operating?

8 MR. SRINIVASARAGHAVAN: Uh-huh.

9 MS. TIN: So you would come in and,
10 you know, review their, their practices and then
11 say this is not appropriate or whatever, or you
12 should consider this. So what happens then is
13 that it would be a larger financial burden to
14 them based upon your review because they would
15 have to modify, perhaps make some modifications
16 or changes.

17 MR. SRINIVASARAGHAVAN: And that is
18 something that we are still reviewing and
19 considering. To your point though, for example,
20 if you had a scenario that, where an operator was
21 stacking batteries too high, if they did not want
22 to actually, you know, go with the proper rack
23 mounted systems for fire suppression, one option
24 would be to make smaller piles and if the

1 warehouse space allows that, then that's
2 something that they're not actually taking any
3 financial burden to do.

4 So those are considerations, and the
5 other side of this is that, you know, we're
6 trying to rely on the fire safety experts as
7 well. So we would try to engage with local,
8 local firefighting crews or even the state fire
9 marshal if we can for some of these analyses.

10 MS. TIN: So that could possibly
11 involve on the Agency part field inspections like
12 you mentioned or perhaps some compliance and
13 enforcement activity?

14 MR. SRINIVASARAGHAVAN: Possibly,
15 yes. Yeah.

16 MS. TIN: Okay.

17 HEARING OFFICER MOISAN: And based on
18 some of the follow-up questioning, is the Agency
19 then going to consider maybe incorporating some
20 more proactive and assistive language in this
21 area and other parts of the proposed rule?

22 MR. SRINIVASARAGHAVAN: That's
23 something we are considering, yes.

24 HEARING OFFICER MOISAN: Okay.

1 Great.

2 MS. VAN WIE: Just a follow-up to
3 Member Tin when she mentioned enforcement. The
4 consequence of not -- of the Agency coming in and
5 saying this isn't sufficient, if the owner
6 disagrees or whatever, is enforcement a
7 possibility?

8 MR. SRINIVASARAGHAVAN: I would -- I
9 would say if they are breaking the rules of 1220,
10 I would -- yeah, I would think so, but we would
11 have to look into that and review it, yeah, to
12 ensure we're not crossing a line.

13 MS. TIN: And would the decisions of
14 the Agency be appealable to the Board?

15 MR. SRINIVASARAGHAVAN: Yeah, I would
16 say so, yes.

17 MR. RAO: And a related question
18 about these rules. Since they don't call for any
19 kind of permitting, has the Agency done any
20 outreach in reaching these automotive parts to
21 let them know that rulemaking is ongoing and they
22 may be subject to compliance if the Board adopts
23 these rules? Were they part of the Agency's
24 outreach?

1 MR. SRINIVASARAGHAVAN: They were
2 part of the Agency's outreach. We reached out to
3 Pick-n-Pull, which is one of the largest
4 automative recyclers and LKQ, which is another
5 automotive recycler. We're in the process of
6 going through the Secretary of State database of
7 automotive recyclers to continue our outreach.

8 MR. RAO: Would it be possible from
9 the Agency to provide names and addresses of some
10 of these big recyclers who you reached out to so
11 we can put them on the notice list?

12 MR. SRINIVASARAGHAVAN: We can
13 certainly look at that, yes.

14 MR. RAO: Thank you.

15 MS. TIN: Sorry. As a follow-up to a
16 follow-up, and I don't know if I've read this in
17 the past or I'm reading in the future, but this
18 would certainly kind of be conducive or helpful
19 to have that grace period. I don't know if we
20 mentioned it before.

21 MR. SRINIVASARAGHAVAN: Uh-huh.

22 MS. TIN: We're going to mention it.
23 So that grace period might be a good
24 consideration to have in order to allow the time

1 for these pallets to be moved around and things
2 like that.

3 MR. SRINIVASARAGHAVAN: Yeah.
4 Something we can definitely review, yes.

5 MS. TIN: Thank you.

6 HEARING OFFICER MOISAN: Any other
7 follow-up? Okay. We will be taking a brief
8 recess and reconvening at 11:30.

9 (A recess was taken.)

10 HEARING OFFICER MOISAN: We are back
11 on the record. At the outset I'd just like to
12 note that Member Michelle Gibson has joined us
13 from Chicago. Welcome. And Mr. San Diego has
14 advised that he would like to say something prior
15 to returning to questioning.

16 MR. SAN DIEGO: Sure. I just wanted
17 to note that while I was sworn in, I'm acting
18 only in my capacity as an attorney for the
19 Agency. My statements were not intended to be
20 testimony on the issue, but on the issue of
21 clarifying references to EPA Universal Waste
22 Rules and Guidance. We'll clarify this in a
23 supplemental filing for the record, specifically
24 with reference to questions 4 and 22 on the issue

1 of universal waste. Thank you.

2 HEARING OFFICER MOISAN: Okay. Thank
3 you. We will resume with question 31. Section
4 1220.210(d)(1), 1220.215(c), and 1220.220(a)
5 require that battery storage plans and
6 contingency plans be developed in consultation
7 with the local fire department and filed with the
8 department. Local fire departments vary in
9 staffing, technical resources, and experience
10 with EV battery fires, and may rely on mutual aid
11 for complex or large-scale responses.

12 Local Emergency Planning Committees
13 (LEPCs) are established under the federal
14 Emergency Planning and Community Right-to-Know
15 Act (EPCRA, 42 U.S.C., Section 11001 et seq) and
16 implemented in Illinois through the Illinois
17 Emergency Planning and Community Right-to-Know
18 Act (430 ILCS 100 ET SEQ.), with the Illinois
19 Emergency Management Agency (IEMA) serving as the
20 State Agency Response Commission (SERC) and
21 appointing LEPCs to coordinate hazardous
22 materials emergency planning.

23 Considering this, should the rules
24 also require consultation with the applicable

1 LEPC, and if so, how should LEPC involvement be
2 incorporated to complement local fire department
3 coordination while avoiding duplication.

4 MR. SRINIVASARAGHAVAN: The proposed
5 rules only require coordination with the local
6 fire departments. For the case of a facility
7 that stores used EV batteries containing
8 chemicals that are not subject to EPCRA or the
9 Illinois equivalent, the Illinois EPA did not
10 want to include any additional requirements where
11 not required by those laws. For any facilities
12 storing used EV batteries that are subject to
13 EPCRA or the Illinois equivalent, these proposed
14 rules do not supersede or otherwise exempt the
15 facility from the requirements of those laws.

16 MS. TIN: Do you have any objection
17 with the local planning committees being involved
18 if it's part of the owner/ operator's plan?

19 MR. SRINIVASARAGHAVAN: We can look
20 at that and review it, yes.

21 MS. TIN: Okay.

22 HEARING OFFICER MOISAN: Question 32.

23 MS. VAN WIE: Wait.

24 HEARING OFFICER MOISAN: I'm sorry.

1 Member Van Wie, please.

2 MS. VAN WIE: Is there any specific
3 provision -- is there a proposed rule that states
4 that or could one be added to make clear that
5 EPCRA and -- is -- the requirements to EPCRA are
6 not superseded?

7 MR. SRINIVASARAGHAVAN: It's not
8 specifically in the rules, but we can definitely
9 take that into consideration and review that.

10 MS. VAN WIE: Thank you.

11 HEARING OFFICER MOISAN: Question 32.
12 Does this rule consider the risk that both --
13 1220.215(b)(5)(b) Emergency Access and Egress:
14 Does this rule consider the risk that both access
15 points could be downwind from a potential fire?
16 If not, should the rule be amended to address
17 this?

18 MR. SRINIVASARAGHAVAN: The rule
19 requires the two points are sufficiently
20 separated to provide ingress and egress. If
21 designed correctly, both egresses should not be
22 downwind from a potential fire. If a facility is
23 required to create a fire safety plan with its
24 local fire department, the fire department could

1 conclude the two points are insufficient.
2 Additionally, in its Public Comment, OSFM
3 suggests incorporating either NFPA 101 or the
4 International Building Code (IBC) and amending
5 this Section to state two points of egress are
6 remotely located consistent with either of NFPA
7 101 or IBC. See Office of the State Fire
8 Marshal's Public Comments, PC#1, page 4. The
9 Illinois EPA does not object to the suggested
10 amendment.

11 MR. RAO: If the Agency does not
12 object to the suggested amendment, could it be
13 possible for the Agency to provide NFPA 101 if
14 we're going to incorporate that document by
15 reference?

16 MR. SRINIVASARAGHAVAN: We would have
17 to review that. That is going to depend on
18 licensing and our purchase of it.

19 MR. RAO: Thank you.

20 MS. TIN: Would it be NFPA 101, or
21 would it be the IBC?

22 MR. SRINIVASARAGHAVAN: We would have
23 to review to see which one. We would also
24 consult with fire marshal to see which one they

1 feel is the most appropriate.

2 MS. TIN: And can you state why they
3 should not be downwind? Should they be upwind
4 from -- should both the entrance and exit be
5 upwind, or should it be one or the other? You
6 said they should not be both downwind?

7 MR. SRINIVASARAGHAVAN: Yeah, they
8 should not both be downwind. That's then
9 potentially exposing yourself to danger. We can
10 probably review it and try to make it more clear.
11 That maybe one needs to be up and one, the other
12 one needs to be down.

13 MS. TIN: Is the entrance and exit
14 for the protection of the owner/operator
15 employees, or is it for the protection of these
16 fire departments?

17 MR. SRINIVASARAGHAVAN: Both. But in
18 this context specifically, according to NFPA 855
19 it was specifically written in the code of fire
20 fighting crews getting out of there safely.

21 HEARING OFFICER MOISAN: Question 33.
22 Emergency Notification Procedures, Subsection
23 (a). 1220.220(g). How does the IEPA intend to
24 be notified immediately in the event of a battery

1 fire? Should the rule specify a method of
2 contact, such as using the Illinois Emergency
3 Management Agency emergency numbers, to ensure
4 clear and timely notification?

5 Subsection (b). 1220.220(g). This
6 rule requires immediate notification for used EV
7 battery fires. Should the rule also explicitly
8 require immediate notification to the IEPA for
9 explosions, even if a fire does not occur, to
10 ensure all emergency situations are captured?

11 Subsection (c). 1220.220(g) and (h).
12 Can IEPA clarify what constitutes a reportable
13 fire and a reportable explosion? For fires,
14 should this include visible flames, smoke, alarm
15 activation, thermal or radiant energy detection
16 or sprinkler activation? For explosions, does
17 this require significant damage to storage
18 containers, buildings, or access points, or would
19 a loud noise alone qualify? Please explain how
20 these definitions align with incident reporting
21 thresholds used to notify IEPA and IEMA?

22 MR. SRINIVASARAGHAVAN: For subpart
23 (a), yes, the Illinois Emergency Management
24 Agency-Office of Homeland Security at

1 (217)782-7860 and the National Response Center
2 (800)424-8802.

3 To subpart (b). Yes. While the
4 Illinois EPA anticipates that any explosion event
5 would coincide with or cause fire, in the case of
6 an explosion without a fire the Illinois EPA
7 agrees that it should be notified.

8 Subpart (c). Any event that triggers
9 alarm activation and/or fire suppression systems
10 in the facility. This applies regardless of
11 whether there are other signs of fire to cover
12 incidents where explosion causes alarm activation
13 and/or fire suppression activation. For
14 incidents where neither occurs but there is
15 evidence of explosion, such as damage to
16 containers, buildings or access points, a report
17 is required. Where there is a loud noise but no
18 evidence to conclude a battery explosion may have
19 occurred, a report is not required.

20 MEMBER MANKOWSKI: Member Mankowski.
21 I just have one follow-up. I just want to make
22 sure the -- let's say they contact IEMA, is IEPA
23 contacted at the same time?

24 MR. SRINIVASARAGHAVAN: They should

1 be. We can probably make that -- we can review
2 that and make that more clear.

3 MEMBER MANKOWSKI: Another question.
4 You suggested using IEMA, related to the rules
5 they have to contact the Agency, which would be
6 EPA, right?

7 MR. SRINIVASARAGHAVAN: Uh-huh, yes.

8 MEMBER MANKOWSKI: Okay.

9 MS. TIN: And that's handled through
10 a programatic thing where IEMA is told, you know,
11 if this occurs with the battery to notify, you
12 know, a particular person at the Illinois EPA
13 whether it's a field department or an emergency
14 response?

15 MR. SRINIVASARAGHAVAN: Right. We
16 would have to coordinate with them and we would
17 try to follow the procedures we have in other
18 programs that have similar notification
19 requirements.

20 MS. TIN: And then as a follow-up,
21 these clarifications that you answered, will they
22 be included in the rulemaking in the proposed
23 rules?

24 MR. SRINIVASARAGHAVAN: Yeah. Yeah.

1 MS. VAN WIE: Can I clarify? Have
2 you discussed this with IEMA because you just
3 said that you would coordinate with them but it
4 doesn't sound like you'd already asked them about
5 including them in the rule. Have you discussed
6 that with them yet?

7 MR. SRINIVASARAGHAVAN: We will have
8 to have further discussions with them, yes.

9 MS. VAN WIE: Thank you.

10 MR. SRINIVASARAGHAVAN: Yep.

11 HEARING OFFICER MOISAN: Question 34.
12 Section 1220.505. Should the recordkeeping
13 requirements also include data on the battery
14 chemistry?

15 MR. SRINIVASARAGHAVAN: Yes, if
16 available.

17 HEARING OFFICER MOISAN: Is that
18 something that is already in a proposed rule?

19 MR. SRINIVASARAGHAVAN: We would have
20 to check. Hold on. So yeah, we will look at
21 this and try to clean this up, yeah.

22 HEARING OFFICER MOISAN: Okay. Thank
23 you.

24 MR. SRINIVASARAGHAVAN: Yeah.

1 MR. MANKOWSKI: Follow-up from Member
2 Mankowski. Are any of the chemistries like
3 proprietary information? Have you looked at that
4 at all to see how available any of that
5 information actually is?

6 MR. SRINIVASARAGHAVAN: That's part
7 of our review. Some of it we imagine is going to
8 be proprietary, but, you know, we're going to be
9 looking for the general chemical characteristics
10 of the battery that would allow us to evaluate
11 risk.

12 MS. TIN: Are there SIP
13 classification requirements on these batteries?

14 MR. SRINIVASARAGHAVAN: We would have
15 to look back at that, yeah.

16 HEARING OFFICER MOISAN: Question 35.
17 Section 1220.505. Subsection (b)(2) requires all
18 records listed in subpart (a) to be in a form and
19 in a format as prescribed by the Agency. Please
20 clarify whether this subsection is referring to
21 subpart (a) or subsection (a).

22 MR. SRINIVASARAGHAVAN: Should be
23 subsection (a).

24 MS. TIN: Question on this. It's not

1 regarding this number 35 but the use of the word
2 Agency. In your definitions you have Agency is
3 the Environmental Protection Agency established
4 by the Act. Do you not mean the Agency should be
5 the Illinois Environmental Protection Agency?

6 That's in the definitions under --

7 MR. SRINIVASARAGHAVAN: Yes, I think
8 we have to -- yes, it is Illinois EPA.

9 MS. TIN: So it will be revised?

10 MR. SRINIVASARAGHAVAN: We will have
11 to revise that, yes.

12 HEARING OFFICER MOISAN: Question 36.
13 Section 1220.515. For the weekly Battery Record,
14 subsections (b)(1), (b)(2), (b)(4), and (b)(5)
15 require information based on "operating day."

16 Subsection (a). Please clarify
17 whether the information in these subsections must
18 be recorded for each operating day of the week to
19 develop the Weekly Battery Record.

20 Subsection (b). If so, comment on
21 why operating day is not used for the weight, in
22 kilograms, of used EV batteries removed from any
23 vehicle on-site under subsection (b)(3).

24 MR. SRINIVASARAGHAVAN: Part 1. Yes,

1 daily operating-day data is to be used to compile
2 a weekly record.

3 Part (b): "Operating day" should be
4 utilized for subsection (b)(3) as well.

5 HEARING OFFICER MOISAN: Question 37.
6 Does the estimated cost of removal for financial
7 assurance include remediation of any releases,
8 spillage, or fire debris necessary to meet Tiered
9 Approach to Corrective Action Objectives (TACO)
10 requirements, or is it limited to the physical
11 removal of used EV batteries?

12 MR. SRINIVASARAGHAVAN: The financial
13 assurance is only intended to apply to removal
14 and other closure activities. In the case of a
15 fire or other release, an enforcement action
16 would commence regarding remediation to meet TACO
17 requirements.

18 MS. TIN: Question here is so you
19 have this -- you have this fire incident and then
20 the batteries are removed, the cleanup proceeds,
21 and you said that an enforcement action would
22 commence regarding remediation. Where is the
23 link between requirements to meet TACO and this
24 fire? That's the first question.

1 MR. SRINIVASARAGHAVAN: That -- so
2 our financial assurance is really intended to
3 apply to removal of the batteries assuming a site
4 is, you know, completely clean and there's no
5 fire. If there is a fire that happened, then
6 that takes into a different consideration. That
7 starts the second tier where we're going in
8 enforcing and analyzing to see if the area needs
9 to be cleaned up.

10 So if a site just closes and they had
11 no fires or incidents, the financial assurance is
12 really there to remove those batteries safely and
13 close the site.

14 MS. TIN: But if they have a fire and
15 the whole program was to -- intended to -- for
16 safety and you're going to do enforcement, where
17 is the link to TACO?

18 MR. SRINIVASARAGHAVAN: It would be,
19 it would most likely follow the enforcement path.

20 MS. TIN: And is enforcement because
21 these are regulated units? What is the
22 connection because it's a hazardous waste? What
23 is the connection?

24 MR. SRINIVASARAGHAVAN: Right. So if

1 we would -- we would have to do some analysis and
2 if pollution was created, that's what would
3 trigger the enforcement activity.

4 MS. TIN: Would this be a voluntary
5 action? Would it be a voluntary cleanup? That's
6 what I'm asking.

7 MR. SRINIVASARAGHAVAN: Most likely
8 in -- we can -- maybe there's a scenario where an
9 operator could do a voluntary cleanup, but if
10 we're taking enforcement most likely it's not
11 going to be a voluntary, but, you know, there's
12 different scenarios. There's the voluntary
13 cleanup program and there's also the times that
14 we actually require cleanup based on, based on
15 pollution we see in the field.

16 MS. TIN: Imminent endangerment
17 scenario? Is it imminent endangerment scenario?
18 Is that what you would be following up under?

19 MR. SRINIVASARAGHAVAN: I would have
20 to review that and get back on that --
21 specifically on all those different scenarios.

22 MS. TIN: And then if they do a
23 voluntary cleanup under the voluntary program,
24 would the result be these no further action

1 letters?

2 MR. SRINIVASARAGHAVAN: So yeah, if
3 they did a voluntary cleanup, they would most
4 likely be enrolled in the site remediation
5 program with, with Bureau of Land Illinois EPA
6 and then they could eventually try to get a no
7 further remediation letter once they've
8 adequately cleaned up the site. That is one
9 path. That's not the only path.

10 MS. TIN: I guess the reason I'm
11 asking is because there are no real standards for
12 cleanup except under TACO.

13 MR. SRINIVASARAGHAVAN: Uh-huh.

14 MS. TIN: So I was looking for a link
15 between the cleanup plan and TACO. That's what I
16 was looking for, a link between the two programs.

17 MR. SRINIVASARAGHAVAN: So we can
18 definitely take that into consideration to try to
19 make that a little bit more clear and link the
20 two.

21 MS. TIN: Thank you.

22 MR. SRINIVASARAGHAVAN: Yeah.

23 HEARING OFFICER MOISAN: Question 38.
24 Section 1220.605. Please comment on whether the

1 following changes to subsection (a) are
2 acceptable to the Agency.

3 (a). Except as otherwise provided in
4 subsection (b), the owner or operator of the used
5 EV battery storage site must at all times
6 maintain financial assurance in an amount equal
7 to or greater than the current approved removal
8 cost estimate calculated under Section 1220.620
9 until the owner or operator is released from
10 financial assurance requirements under Section
11 1220.610.

12 MR. SRINIVASARAGHAVAN: The Illinois
13 EPA does not oppose the suggested changes.

14 HEARING OFFICER MOISAN: Question 39.
15 The proposed rules repeatedly reference a
16 "current approved removal cost estimate," but
17 Section 1220.620 does not specify whether the
18 removal cost estimate is subject to IEPA review
19 and written approval. Additionally, subsection
20 (c) states that the "owner or operator must base
21 the removal cost estimate on costs to the Agency
22 under a contract to perform battery removal
23 actions in the area in which the site is
24 located," but it is unclear where this

1 information comes from.

2 Subsection (a). Please clarify
3 whether IEPA intends to review and provide
4 written approval of removal cost estimates, and
5 if so, please propose text to make that process
6 explicit in the rule.

7 Subsection (b). How is an owner or
8 operator expected to determine the "costs to the
9 Agency" for battery removal in their area? Has
10 IEPA established or made publicly available the
11 relevant contracts, rates, or guidance?

12 MR. SRINIVASARAGHAVAN: Part (a).
13 The Illinois EPA intends to review and approve
14 removal cost estimates. Proposed language is as
15 follows:

16 Section 1220.620 Removal Cost
17 Estimate.

18 (a). No later than February 1 of
19 each year, the owner or operator must submit to
20 the Agency, a written estimate of the cost of
21 removing the maximum number of used EV batteries
22 that will be accumulated at the site at any time.
23 This cost estimate must be submitted by the owner
24 or operator along with the annual registration

1 required under Section 22.23f(c) of the Act. Any
2 removal cost estimate must be submitted on forms
3 prescribed by the Agency. Any removal cost
4 estimate submitted to the Agency must be reviewed
5 by and receive written approval from the Agency.
6 If a removal cost estimate is rejected, the owner
7 or operator must submit a corrected removal cost
8 estimate within 30 days of the rejection.

9 Part (b). An owner or operator would
10 have to determine and provide to the Agency based
11 on the site-specific information and local costs
12 for battery transport and removal, the cost of
13 removal for the highest total number of used EV
14 batteries stored at the site in a given year.

15 MS. TIN: I think you said that the
16 removal cost was just for the removal cost of the
17 batteries and not necessarily the cleanup costs;
18 is that correct?

19 MR. SRINIVASARAGHAVAN: Yes. Yeah,
20 removal cost of the batteries, yes.

21 MS. TIN: So there would be no cost
22 for the cleanup?

23 MR. SRINIVASARAGHAVAN: In a perfect
24 scenario if they were properly storing the

1 batteries, there shouldn't be too much cleanup,
2 right, but if there was cleanup to be required,
3 that's when we would pursue enforcement because
4 that's a pollution event.

5 MS. TIN: So wouldn't you have to
6 write these rules based upon the worst case
7 scenario that there would be a cleanup?

8 MR. SRINIVASARAGHAVAN: That's
9 something we can take into consideration
10 especially when we're looking at financial
11 assurance to protect the Agency.

12 MS. TIN: And that's where I was
13 thinking --

14 MR. SRINIVASARAGHAVAN: Yeah.

15 MS. TIN: -- in this section, this
16 new modification, you would add the link to TACO
17 if appropriate. Thank you.

18 MR. SRINIVASARAGHAVAN: Appreciate
19 it. Thank you.

20 HEARING OFFICER MOISAN: In your
21 proposed language, is the timing of getting
22 Agency approval clear enough to the
23 owner/operator because it has the deadline of
24 February 1 each year to provide the written

1 estimate, but then it says the Agency must --

2 MS. VAN WIE: I have a question on --

3 I didn't realize you had moved on.

4 HEARING OFFICER MOISAN: We haven't

5 moved on. I'm asking a question --

6 MS. VAN WIE: Oh, okay.

7 HEARING OFFICER MOISAN: -- just

8 about the wording that they proposed. I just

9 want to make sure that that the timing of things

10 are clear for owner/operators.

11 MR. SRINIVASARAGHAVAN: We can

12 definitely look at that and try to make it more

13 clear, yes. Thank you.

14 HEARING OFFICER MOISAN: Member Van

15 Wie.

16 MS. VAN WIE: Is the expectation that

17 the financial assurance will be updated every

18 year?

19 MR. SRINIVASARAGHAVAN: Yes, if there

20 are changes.

21 MS. VAN WIE: Is it possible to make

22 that clear that the financial or that the

23 financial assurance amount needs to be updated on

24 a yearly basis?

1 MR. SRINIVASARAGHAVAN: Yeah, we can
2 definitely review that, and we want to -- we want
3 to ensure that it's in align with the other
4 programs that require financial assurance such as
5 our tires facility and other facilities.

6 MS. VAN WIE: Okay.

7 HEARING OFFICER MOISAN: Subsection
8 (b) has the second question that says: Has IEPA
9 established or made publicly available any
10 guidance? I'm not sure we answered that in the
11 written response. So would you mind elaborating
12 on that?

13 MR. SRINIVASARAGHAVAN: Not at this
14 time. We'll have to go back and yeah, put on
15 further guidance, yeah.

16 HEARING OFFICER MOISAN: Thank you.
17 Sure. Okay. Question 40. Section 1220.620(a)
18 requires that the owner or operator by February 1
19 of each year, submit to IEPA removal cost
20 estimate. The second sentence would require
21 submitting the estimate "along with the annual
22 registration required under Section 22.23f(c) of
23 the Act." Section 22.23f(c)'s February 1
24 registration requirement applies only to sites

1 meeting or exceeding the 5,000 kilogram
2 threshold, whereas the removal cost estimate
3 generally applies to all sites, regardless of
4 size, creating a potential misalignment.

5 Would IEPA oppose deleting the second
6 sentence of Section 1220.620(a) and amending
7 Section 1220.205(a)(6)(A) as follows: "Register
8 the site by February 1 of each year with the
9 Agency on forms and in a format prescribed by the
10 Agency?"

11 MR. SRINIVASARAGHAVAN: The Illinois
12 EPA agrees with the proposed changes.

13 HEARING OFFICER MOISAN: Question 41.
14 Agency-Prescribed Forms. Subsection (a). Other
15 than annual registration, has IEPA developed any
16 other forms referred to in the proposed rules as
17 "prescribed by the Agency"? See, proposed
18 Sections 1220.205(a)(6)(A) (registration);
19 1220.505(b) (records); 1220.620(a) (removal cost
20 estimates); and 1220.625 (financial assurance
21 mechanisms).

22 Subsection (b). Please provide blank
23 forms (or prototypes if still being developed in
24 both PDF and Word.

1 Subsection (c). Will IEPA accept
2 each of these forms electronically or only on
3 paper? At which address or addresses may each of
4 these forms be submitted?

5 MR. SRINIVASARAGHAVAN: Subpart (a).
6 The Illinois EPA is in the process of revising
7 its financial assurance forms and drafting forms
8 for registration and records under this Part.

9 Subpart (B). Draft forms can be
10 provided once full drafts are complete.

11 Subpart (c). The Illinois EPA will
12 accept forms electronically and on paper. The
13 Illinois EPA intends to create a portal for all
14 submissions. However, until the portal is
15 available, all forms must be submitted on paper.
16 All forms must be submitted to Illinois EPA
17 headquarters at: Illinois Environmental
18 Protection Agency, Materials Management and
19 Compliance Section, 2520 W. Iles Avenue, P.O.
20 Box 19276, Springfield, Illinois.

21 HEARING OFFICER MOISAN: Does IEPA
22 have an expectation on when the forms may be
23 completed on the portal as well?

24 MR. SRINIVASARAGHAVAN: The portal we

1 will have to really get back to you on a
2 deadline, but we are hoping to have some forms by
3 next hearing. We're going to do our best.

4 MS. TIPSORD: Excuse me. Did you say
5 next year?

6 MR. SRINIVASARAGHAVAN: Next hearing.

7 MS. TIPSORD: I'm sorry. I thought
8 you said next year earlier.

9 MR. SRINIVASARAGHAVAN: Yeah.

10 HEARING OFFICER MOISAN: Okay.

11 Question 42. Section 1220.625. This section
12 specifies that an "owner or operator" may use any
13 one of the following mechanisms to provide
14 financial assurance for removal of used EV
15 batteries or may use a combination of these
16 mechanisms to the extent authorized under Section
17 1220.640."

18 Subsection (a). Please comment on
19 whether the first "may" in this provision should
20 be changed to "must" to make it a requirement to
21 use one of the three listed mechanisms or a
22 combination of the three. If not, would the
23 owner or operator be able to provide financial
24 assurance by other means like self-insurance or

1 corporate guarantee.

2 Subsection (b). Also, comment on
3 whether the use of a combination of mechanisms
4 reference to Section 1220.640 should be changed
5 to 1220.630, which is addresses the use of
6 multiple financial mechanisms.

7 MR. SRINIVASARAGHAVAN: Subpart (a).
8 Yes, the first "may" should be changed to "must."
9 While an owner or operator may use any of the
10 mechanisms included, it must use one of the
11 included mechanisms, unless using multiple as
12 permitted in Section 1220.630.

13 Subpart (b). Yes, the reference
14 should be changed to Section 1220.630.

15 HEARING OFFICER MOISAN: Question 43.
16 A draft of nonsubstantive updates to the first
17 notice rule language has been prepared, including
18 removal of redundant or unnecessary text,
19 updating outdated references, typographical
20 corrections, and other clarifications. See
21 Exhibit 3 to this Attachment A. Does IEPA have
22 any comments or concerns regarding these changes?

23 MR. SRINIVASARAGHAVAN: The Illinois
24 EPA does not oppose the changes contained in

1 Exhibit 3.

2 MS. TIN: I don't have any questions
3 on that, but I do have some questions on the rule
4 but not the technical support documents. Do you
5 want me to wait until the end or ask him now?

6 HEARING OFFICER MOISAN: You can ask
7 it now, any questions to that.

8 MS. TIN: Okay. Section 1220.510
9 Battery Tracking Receipts. In subsection (a) it
10 says that upon receiving any used batteries at
11 the EV battery storage site, the owner or
12 operator of the used EV battery storage site must
13 provide a receipt to the transporter and keep a
14 copy of the receipt. The receipt must include
15 all of the following: the signature of the
16 owner/operator, the name and special weight
17 hauler permit number of the transporter, the
18 signature of the transporter, etc.

19 Okay. My question here is is this a
20 transporter under RCRA, or is this just a
21 physical transporter? There's a definition of a
22 transporter under RCRA.

23 MR. SRINIVASARAGHAVAN: We will have
24 to review this, but we did -- I believe yeah,

1 we'll have to review this to -- just to see
2 which -- I believe we went towards the RCRA
3 definition, but I want to review it before giving
4 you a definitive answer.

5 MS. TIN: And then also there's no
6 definition of special waste hauler under your
7 definition, and this looks like the manifest
8 system, you know, the five-part manifest itself,
9 and if you're building in that five-part manifest
10 system, then it should be clearly aligned in the
11 rules.

12 MR. SRINIVASARAGHAVAN: We will take
13 that into consideration. Appreciate that.

14 MS. TIN: And then I have Section,
15 1220.615, Application Of Proceeds and Appeal.
16 Under subsection (c) it says: The following
17 Agency actions may be appealed to the Board as a
18 permit denial.

19 So you're referencing a permit denial
20 although this is not a permit denial, but I
21 understand what you're referencing. It should be
22 probably as a final action.

23 MR. SRINIVASARAGHAVAN: Yes. Yes.

24 MS. TIN: But these instances --

1 these five instances have to do with financial.
2 Do you envision any other areas where they could
3 appeal any of these decisions to the Board?

4 MR. SRINIVASARAGHAVAN: You mean
5 other -- other situations that could appeal to
6 the Board outside of these financial situations?

7 MS. TIN: Yes. For example, let's
8 say they have a discrepancy as to whether they
9 meet the threshold or not. You say they meet the
10 threshold. Can they appeal that decision?

11 MR. SRINIVASARAGHAVAN: We will have
12 to look at that, but I imagine that those
13 situations could arise so we would review those.

14 MS. TIN: Then this section needs to
15 be revised?

16 MR. SRINIVASARAGHAVAN: Uh-huh.

17 MS. TIN: Those are my two questions.
18 Thank you.

19 HEARING OFFICER MOISAN: Okay. And
20 to the prefiled questions and answers, we are at
21 question 44, Technical Support Document, also
22 known as TSD. TSD on page 44 notes that P.A.
23 103-1006, which addresses end-of-life electric
24 vehicle and battery electric storage system

1 batteries, added requirements for sites that
2 store more than 5,000 kilograms of used EV
3 batteries.

4 Subsection (a). Please clarify
5 whether the proposed rules expand the scope to
6 regulate storage sites that store less than 5,000
7 kilograms of used EV batteries.

8 Subsection (b). If so, is it the
9 Agency's intent that a used EV battery storage
10 site storing one or two used EV batteries must
11 comply with Part 1220, including financial
12 assurance requirements?

13 MR. SRINIVASARAGHAVAN: Subpart (a).
14 Yes, the proposed rules expand the scope to
15 regulate storage sites that store less than 5,000
16 kilograms of used EV batteries.

17 Subpart (b). As written, yes, they
18 do.

19 HEARING OFFICER MOISAN: Question 45.
20 For the record, please provide the following
21 information on typical EV batteries that are
22 currently being used in cars and trucks sold in
23 the United States, weight of one used EV battery,
24 volume occupied by one used EV battery, number of

1 batteries that adds up to a weight of 5,000
2 kilograms.

3 MR. SRINIVASARAGHAVAN: The weight
4 approximately 480 kilograms, 1.1 cubic meters in
5 volume, and ten batteries in a 5,000 kilogram
6 accumulation. However, the Illinois EPA notes
7 that EV batteries can vary greatly in weight,
8 volume, and energy capacity based on manufacturer
9 and model. And just for the record the
10 references that were obtained to -- to these
11 numbers specifically were the Tesla Model 3 and
12 the Mustang Mach-E, which are two of the most
13 popular EVs on the road today.

14 MS. TIN: And how would that change
15 if you regulate light truck and semis batteries?

16 MR. SRINIVASARAGHAVAN: We would --
17 we would have to go back based on our response to
18 the previous question that you had regarding
19 this. I think we will have to look at a tiered
20 approach where we're classifying batteries
21 differently, if it's coming from, you know,
22 light-duty truck or semis or where the -- where
23 these weight characteristics will not be fully
24 representative.

1 HEARING OFFICER MOISAN: Question 46.

2 Please clarify whether used EV batteries can be
3 stored indefinitely at used EV battery storage
4 sites regulated under Part 1220. If so, comment
5 on whether the rules should include a time
6 limitation to encourage safe recycling or
7 disposal of used EV batteries and deter large
8 accumulations.

9 MR. SRINIVASARAGHAVAN: If the used
10 EV batteries are stored properly adhering to the
11 accumulation limits in properly built fire-rated
12 rooms or structures (if outside), the batteries
13 can be stored long-term.

14 HEARING OFFICER MOISAN: Question 47.

15 On page 45 TSD states, "the proposed rules are
16 focused on storage of fully assembled batteries.
17 They are not intended to extend to facilities
18 that receive only components of EV batteries
19 after the batteries are disassembled." Please
20 comment on whether the definition of "Used EV
21 battery" under Section 1220.115 should include
22 the phrase "fully assembled". For example,
23 Section 1220.210(d)(1)(A) seemingly allows the
24 storage of "shredded" batteries.

1 MR. SRINIVASARAGHAVAN: The proposed
2 rules are intended to only regulate whole, used
3 EV batteries. References to shredded batteries
4 are directed towards recycling facilities that
5 are actively recycling whole, used batteries.
6 The references in Sections 1220.210(d)(1)(A) and
7 1220.215(c)(1)(A) to shredded batteries are only
8 in the context of factors that may be important
9 for plans in developing -- in developed with a
10 local fire department. Part 1220 does not
11 regulate the storage of shredded batteries. The
12 Illinois EPA does not oppose including "fully
13 assembled" in the definition of "used EV
14 battery."

15 MS. TIN: Is this clarification going
16 to be made in the rules?

17 MR. SRINIVASARAGHAVAN: We will --
18 yeah, we're going to review that.

19 MS. TIN: Thank you.

20 MR. SRINIVASARAGHAVAN: Kind of
21 clarify that, yeah.

22 HEARING OFFICER MOISAN: Question 48.
23 TSD notes that the proposed regulations are
24 drafted within the context of used EV batteries

1 that are not actively charging or discharging.
2 Please comment on whether the proposed rules
3 should include a prohibition against active
4 charging or discharging of used EV batteries at
5 storage sites.

6 MR. SRINIVASARAGHAVAN: Batteries may
7 be discharged at storages sites for safe storage.
8 Batteries may not be charged and/or the energy
9 may be utilized at storage facilities. If
10 batteries are used for charging and discharging
11 (i.e. batteries are used for power) they are no
12 longer being stored and are actively being used.
13 The Illinois EPA does not oppose a prohibition
14 against charging any batteries stored pursuant to
15 this Part, but discharging for the purposes of
16 safe storage should be allowed.

17 HEARING OFFICER MOISAN: Question 49.
18 On page 45, TSD notes that under the NFPA
19 standards, indoor storage of used EV batteries is
20 allowed in specifically constructed rooms or
21 spaces that do not exceed 900 square feet. This
22 recommendation is included under Section
23 1220.210(c)(1) as a limitation on used EV
24 batteries storage piles instead of storage room.

1 Subsection (a). Please clarify
2 whether the proposed rules allow multiple storage
3 piles each with cross-sectional area of 900
4 square feet to be located inside one room; or
5 subsection (b), the total cross-sectional area of
6 one or more storage piles in a single room is
7 limited to 900 square feet.

8 MR. SRINIVASARAGHAVAN: The answer is
9 going to combine these two. Each room shall have
10 a cross-sectional area of up to 900 square feet.
11 Within that room, the battery pile may be a
12 cross-sectional area of 900 square feet or
13 multiple smaller piles can be encompassed within
14 that room size. Regardless of a single or
15 separate piles in a single room, the spacing
16 requirements of Section 1220.210(c) must be
17 followed.

18 MR. RAO: A follow-up.

19 HEARING OFFICER MOISAN: Yes.

20 MR. RAO: Do you think the proposed
21 rules under 1220.210(c)(1) reflects your response
22 clearly?

23 MR. SRINIVASARAGHAVAN: Give me a
24 second to pull that up. 1220.210(c)(1).

1 MR. RAO: Is it limiting the size of
2 the room or the size of the battery pile?

3 MR. SRINIVASARAGHAVAN: We can, we
4 can look at this and try to review to see if we
5 need to clarify this a little bit.

6 MR. RAO: Thank you.

7 MR. SRINIVASARAGHAVAN: Yep.

8 HEARING OFFICER MOISAN: Question 50.
9 On page 46, TSD states that batteries stored
10 outdoors must be stored, "individually or in a
11 group, within enclosed containers large enough to
12 accommodate the volume stored." Further, Section
13 1220.215(b)(1) requires containers to be
14 non-combustible or designed for used EV battery
15 collection use.

16 Subsection (a). Please describe the
17 typical materials used for making outdoor
18 non-combustible used EV battery storage
19 containers.

20 Subsection (b). If containers are
21 commercially available, submit brochures or any
22 marketing materials showing typical storage
23 containers with material specifications.

24 Subsection (c). Comment on whether

1 NFPA has any specifications for the material used
2 for outdoor battery storage containers. If so,
3 should the rules require the outdoor containers
4 to meet such specifications?

5 And subsection (d). Comment on
6 whether outdoor battery storage containers are
7 available to accommodate the maximum volume
8 allowed under the proposed rules.

9 MR. SRINIVASARAGHAVAN: Subpart (a).
10 Typically fire-resistant shipping containers are
11 made of Corten Steel. Certain companies utilize
12 this material to make four-hour fire-rated
13 containers.

14 Subpart (b). A search on multiple
15 popular internet search engines yields results
16 for vendors building specialized fire-rated
17 containers for storing or shipping special cargo
18 that needs to meet hazardous material
19 specifications. The Illinois EPA cannot endorse
20 any single vendor.

21 Subpart (c) NFPA 855 does not specify
22 container material; rules already require
23 non-combustible or purpose-designed containers.

24 Subpart (d). Commercially available

1 containers can accommodate any volume allowed
2 under the spacing rules.

3 MS. TIN: Do you anticipate outdoor
4 storage -- do you have any knowledge that outdoor
5 storage would be used at all if they have to
6 containerize them anyway?

7 MR. SRINIVASARAGHAVAN: We, we do not
8 know that right now, but we are hoping when we
9 reach out to some of these recyclers we will
10 learn some of that information.

11 MS. TIN: Okay.

12 HEARING OFFICER MOISAN: Question 51.
13 TSD on page 46 states that any facility storing
14 5,000 kilograms or more of used EV batteries must
15 also maintain a fire safety plan that allows for
16 adequate capture of all fire-related runoff in
17 the event of a fire to specifically minimize
18 offsite impact from fires and fire fighting
19 runoff. See also section 1220.215(b)(5)(A).
20 Please comment on whether the rule should specify
21 that disposal of any battery fire runoff must
22 comply with the requirements of 35 Ill. Adm. Code
23 309 (see 35 Ill. Adm. Code 811.103(a)(2)).

24 MR. SRINIVASARAGHAVAN: Runoff

1 capture is required; disposal must comply with
2 all applicable Illinois Regulation (including 35
3 Ill. Adm. Code 309.

4 MS. TIN: Would this also include a
5 concrete pad and diking?

6 MR. SRINIVASARAGHAVAN: The outdoor
7 storage does require to be on a concrete pad,
8 yes.

9 MS. TIN: Thank you.

10 MR. SRINIVASARAGHAVAN: Or asphalt,
11 just not on grass basically.

12 MS. TIN: Thank you.

13 MR. RAO: Follow-up.

14 HEARING OFFICER MOISAN: Yes,
15 Mr. Rao.

16 MR. RAO: So should the rules include
17 a requirement or a specification that runoff
18 capture under these rules must be disposed of in
19 compliance with the code regulations --

20 MR. SRINIVASARAGHAVAN: Yeah.

21 MR. RAO: -- under Part 309?

22 MR. SRINIVASARAGHAVAN: We can
23 certainly look at that and try to clarify it to
24 make it more clear.

1 HEARING OFFICER MOISAN: Question 52.
2 On page 47, TSD states the proposed rules "do not
3 require any additional battery-fire specific
4 technology such as thermal monitoring or fire
5 suppression systems beyond commonly available
6 air-aspirated smoke detectors and automatic
7 sprinkler systems.

8 Subpart (a). Please explain why the
9 Agency did not consider the use of battery-fire
10 specific technology for used EV storage sites
11 regulated under Part 1220.

12 Subsection (b). Did the Agency
13 consult with any fire safety experts to determine
14 the adequacy of the proposed used EV battery
15 storage site requirements?

16 MR. SRINIVASARAGHAVAN: Subpart (a).
17 The Illinois EPA did not require specialized
18 thermal monitoring of advanced suppression
19 because NFPA 855-adapted standard sprinklers and
20 air-aspirating smoke detection, combined with
21 pile isolation, provide adequate protection using
22 commonly available materials.

23 Subsection (b). Yes, the Illinois
24 EPA consulted with fire safety experts. And I

1 can give you some of those if you need me to,

2 but --

3 MS. TIN: We have to differentiate
4 between the owner/operator responsibilities and
5 the responsibilities of the fire department. So
6 I think what you're trying to talk about is the
7 owner/operator's responsibility in this part?

8 MR. SRINIVASARAGHAVAN: Uh-huh.

9 MS. TIN: Is that correct?

10 MR. SRINIVASARAGHAVAN: Yes. Yeah.

11 MS. TIN: But if the owner/ operator
12 -- but if the fire department comes in, they can
13 use other methods of fire suppression beyond just
14 water sprinkler system, right?

15 MR. SRINIVASARAGHAVAN: Correct,
16 yeah, and, you know, our -- NFPA 855 really leans
17 on isolating these accumulations of batteries.
18 That's, that's the main way the code works to be
19 able to, to minimize the risk of fire. We are
20 not -- these rules are not in no way preventing
21 owners and operators from proposing other
22 solutions and/or -- and still doesn't, you know,
23 disallow local fire departments or the state fire
24 marshal to come in and require other technologies

1 as well if they deem it to be necessary.

2 MS. TIN: Okay. And if you consulted
3 with the fire safety experts, can you give us,
4 you know, citations and conversations and names
5 of the people that you consulted with?

6 MR. SRINIVASARAGHAVAN: I can. I
7 just need to get their permission.

8 MS. TIN: Okay.

9 HEARING OFFICER MOISAN: Anyone else
10 have any additional questions for the Agency's
11 witness?

12 Hearing none we will proceed to
13 testimony -- or public comment that was not
14 prefiled.

15 Is there anyone on the sign-in sheet
16 in Chicago?

17 MR. PAULEY: No.

18 HEARING OFFICER MOISAN: Thank you.
19 None in Springfield as well.

20 MS. VAN WIE: No.

21 HEARING OFFICER MOISAN: Is there
22 anyone present here today who did not prefile
23 testimony but does wish to offer testimony?

24 Hearing none, we will move on to

1 comments. We just confirmed that there were no
2 sign-ins of anyone present who wished to offer
3 public comment on the Agency's proposal in
4 Springfield or Chicago.

5 We will now take a moment to address
6 the DCEO Economic Impact Statement.

7 Section 27(b) of the Environmental
8 Protection Act provides that the Board must
9 request that the Department of Commerce and
10 Economic Opportunity (DCEO) conduct an economic
11 impact study of proposed rules before the Board
12 adopts the rules.

13 The Board must make either the
14 economic impact study, or the department's
15 explanation for not conducting one, available to
16 the public at least 20 days before a public
17 hearing.

18 In a letter dated January 23, 2026,
19 the Board's Chair, Barbara Flynn Currie requested
20 that DCEO conduct an economic impact study of
21 this rulemaking proposal. The Board specifically
22 requested a response no later than February 23,
23 2026.

24 To date, the Board has not received

1 the response from DCEO.

2 The Board will address this issue at
3 the second hearing in June. At this time is
4 there anyone present today who would like to
5 testify regarding the Board's request for a study
6 and DCEO's response?

7 Hearing none, I would like to go off
8 the record for just a moment.

9 (There was an off-the-record
10 discussion.)

11 HEARING OFFICER MOISAN: I will
12 address a few procedural matters before we
13 adjourn. The transcript of today's hearing is
14 expected to be available no later than Monday,
15 April 6, 2026. Upon receipt, the Board will post
16 the transcript to COOL, from which it will be
17 available for review and download.

18 A written response to matters raised
19 during this hearing may be filed. Any such
20 filings are due by Tuesday, May 5, 2026.

21 The second hearing is scheduled for
22 Thursday, June 4, 2026, beginning at 9 a.m. by
23 videoconference between the Illinois Room at 555
24 West Monroe Street, Chicago, Illinois 60601 and

1 Conference Room 1.005 at 2520 W. Iles Avenue,
2 Springfield, Illinois 62704.

3 The deadline to prefile testimony for
4 the second hearing is Tuesday May 5, 2026, and to
5 prefile questions for it is Tuesday, May 19,
6 2026. If participants wish to prefile answers,
7 those answers should be prefiled by Tuesday, May
8 26 at 9 a.m. The Board will set a post-hearing
9 public comment deadline at or following the
10 second hearing.

11 Are there any other matters that need
12 to be addressed for the record at this time?

13 Hearing none, I would like to thank
14 everyone for their participation today, and this
15 hearing is adjourned.

16 (Hearing adjourned at 12:25 p.m.)

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1 CERTIFICATE OF REPORTER

2 STATE OF ILLINOIS)
)
3 COUNTY OF SANGAMON)

4 I, Rhonda Rhodes Bentley, CSR,
License No. 084-002706, a Certified Shorthand
5 Reporter, within and for the State of Illinois,
do hereby certify that the hearing aforementioned
6 was held on March 19, 2026, and that said hearing
was taken down in stenograph notes, afterwards
7 reduced to typewriting by me, and that this
transcript is a true and accurate transcription
8 of the testimony.

9 I do hereby certify that I am a
disinterested person in this cause of action,
10 that I am not a relative of any party or any
attorney of record in this cause or an attorney
11 for any party herein or otherwise interested in
the event of this action, and that I am not in
12 the employ of the attorneys for either party.

13 IN WITNESS WHEREOF, I have hereunto
set my hand this 31st day of March, 2026.

14

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17 _____
Certified Shorthand Reporter
CSR #084-002706

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