Focus Group Meeting for P.L. 2019, c.397 (Dirty Dirt Law)

Meeting to Consider Proposed Amendments to N.J.A.C. 7:26A to Provide for the Management of Soil at Class B and Exempt Facilities

May 31, 2023

Focus Group Meeting for P.L. 2019, c.397 (Dirty Dirt Law)

Today's Focus:

- Discussion of potential changes to the definition of Class B Recyclable Material
- Possible changes to Recycling Exemption #20
- Possible new recycling exemption
- Quality Assurance/Control Provisions

May 31, 2023

Goals of this Meeting
(and beyond!)

- Seek feedback
- Input, recommendations, suggestions
- Develop a rule that accomplishes legislative intent with clear and practical regulatory standards

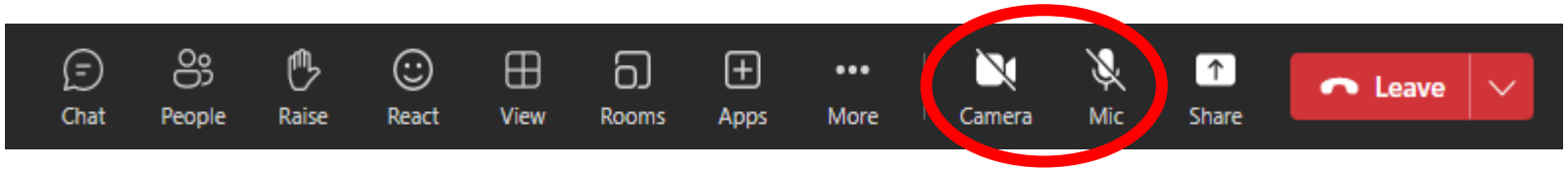
General Disclaimer

The information within this meeting is intended to facilitate discussions on various existing and potential regulatory mechanisms.

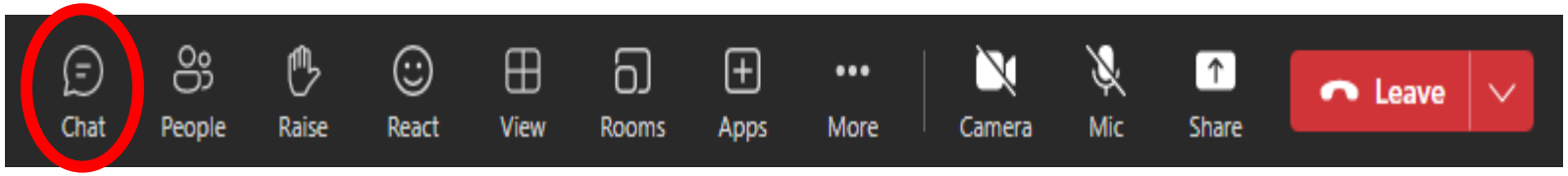
No final decision regarding this information is expressed or implied.

Meeting Etiquette Guidelines

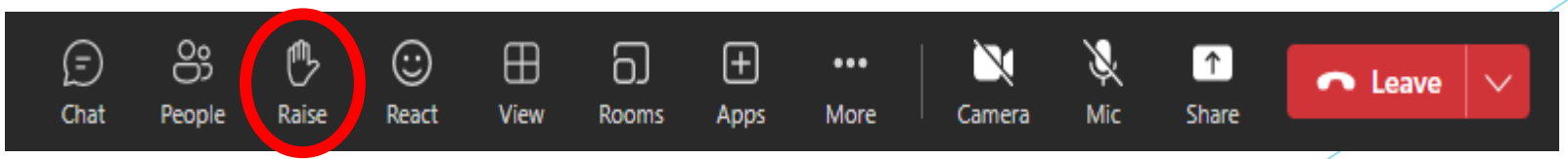
- Please be sure that your microphone is muted, and camera is off.
  - Unless prompted to unmute for comments



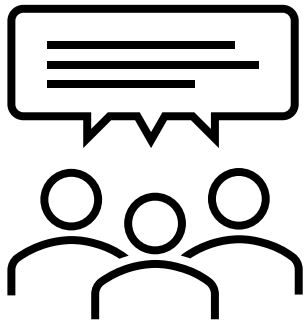
- The chat feature will be used to only address technical meeting issues and to display and respond to Poll Questions.



- Should you wish to speak, raise your hand and wait to be called. When called upon you may unmute your microphone and enable your camera.
  - Please introduce yourself and whom you represent.



Poll Questions

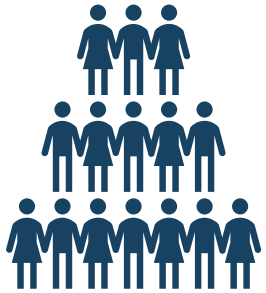


Some of the slides in this meeting will introduce questions related to potential rule-writing. Please answer to your best ability, your feedback is valued!

A link will be provided in the Chat that will direct you to each poll question as they are introduced.

There will be a few minutes after each question to review and discuss responses.

NJDEP Rulemaking Team



Bureau of Solid Waste Compliance and Enforcement

- Thomas Farrell, Bureau Chief
- Karen Kloo, Facilitator

Bureau of Recycling and Hazardous Waste Management

- Dana Lawson, Bureau Chief
- Daniel Murray, Environmental Engineer 2

Supplemental NJDEP Resources

- Jung Kim, Regulatory Officer
- Seth Hackman, Bureau Chief, Bureau of Solid Waste, Planning and Licensing
- Robert Gomez, Bureau Chief, Bureau of Hazardous Waste Compliance and Enforcement
- Anthony Teel, Software Development Specialist 2, Bureau of Information Systems
- Tyrone Jordan, Administrative Analyst, Bureau of Information Systems

Why was the Dirty Dirt Law promulgated?

Why was the Dirty Dirt Law promulgated?

- By Anthony G. Attrino | NJ Advance Media for NJ.com

- "WOODBRIDGE – The township's popular Highland Grove pool – closed more than a year ago due to PCB contamination in the area – won't reopen until at least the summer of 2014, according to a report in Greater Media Newspapers."

Why was the Dirty Dirt Law promulgated?

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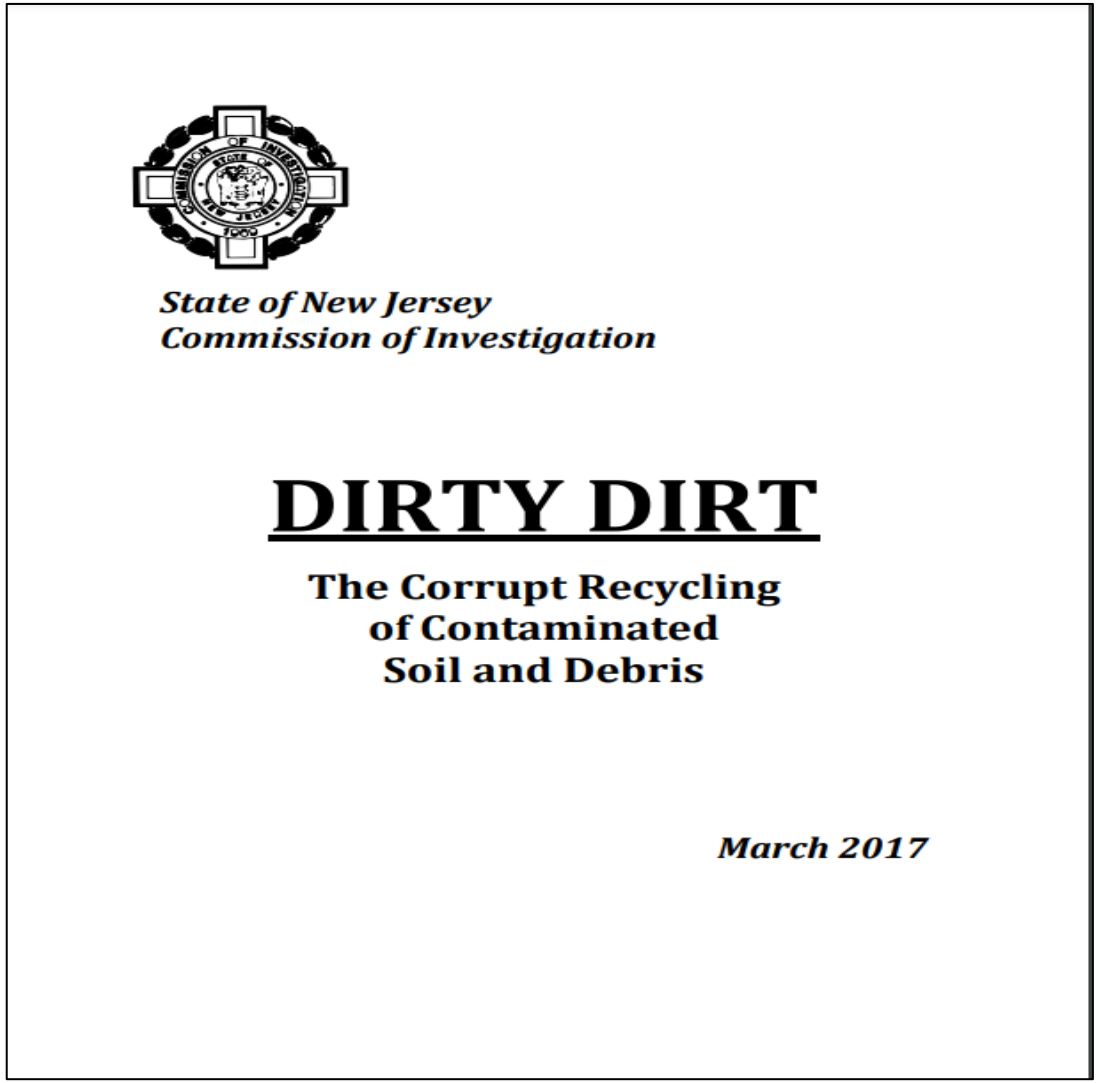


State of New Jersey
Commission of Investigation

DIRTY DIRT

The Corrupt Recycling of Contaminated Soil and Debris

March 2017

“Free Fill” is not free!

MAY 4, 1:24 PM

Please call me ASAP

Your guy dropped off this dirt and had no machine and now it’s going to rain and I’m going to have a muddy mess in my yard. Please come get the dirt.

He said yesterday he’d have someone come today with the machine but didn’t

MAY 23, 8:59 AM

You gave us bad dirt and we have to pay to get it removed. I’m reporting you everywhere.

Change in the Definition of Solid Waste

In September of 2017, the Definition of Solid Waste found at N.J.A.C. 7:26-1.6(a)6 was revised to include a correlation with the Residential and Non-Residential Direct Contact Soil Remediation Standards, whichever was more stringent, at N.J.A.C. 7:26D.

Chemical Triggers for the Definition of Solid Waste

- In May of 2021 the remediation standards at N.J.A.C. 7:26D were revised such that the Residential standards were **always** more stringent than the Non-Residential standards.

- The reference to the term "Direct Contact" was replaced for both Residential and Non-Residential settings to reflect the exposure pathways of **Ingestion-Dermal**, **Inhalation** and **Migration to Ground Water**.

- The definition of solid waste is chemically triggered if there is an exceedance of the Residential Ingestion-Dermal or Residential Inhalation soil remediation standards. ***Exceedance of the Migration to Ground Water standard alone does not trigger the definition of solid waste.***

- The definition of solid waste at N.J.A.C. 7:26 – 1.6(a)6 can be chemically triggered if the residential Ingestion-Dermal or Residential Inhalation standards are exceeded.
  - **Non-Restricted Soil and Fill Recyclable Materials (NRSFRM) meets these standards.**

Typical Contaminants Trigger the Definition of Solid Waste from Construction & Demolition Debris Materials

- **Metals:** lead, arsenic, cadmium, vanadium, antimony, cobalt, mercury - from pigments, drying agents, fungicides, electronic switches, residue from oils/combustion of fossil fuels, concrete (can have incorporated fly ash in its production), sheet metal or, entrained historical fill.
  - In addition, though no promulgated standard exists, hexavalent chromium can be found over the policy criteria of 20 ppm.
- **PAHS:** benzo[a]pyrene, dibenz[a,h]anthracene – from asphalt or concrete binders
- **Total PCBS** – from caulking, machine/transformer oils
- **Pesticides** – from residue applied to concrete foundations or within entrained soils

Mixed Class B Material (Unprocessed)

Screened Soil

Economic Impacts

Additional Costs Per Cubic Yard for Tested Fill	
Assuming analyses is conducted for Target Compound List/Target Analyte List (TCL/TAL)	
Average cost per sample analyzed of $523*	
Analytical Frequency per cubic yard	Cost ($) per cubic yard
20	$26.15
30	$17.43
100	$5.23
250	$2.09
500	$1.05
1,000	$0.52

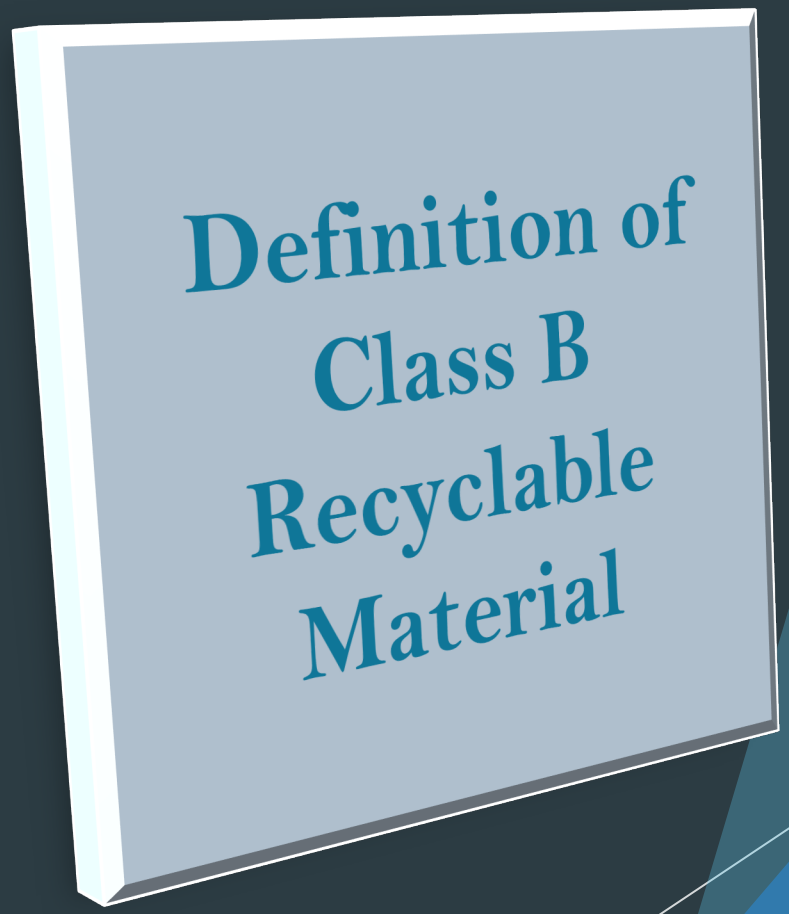
Economic Impacts

Additional Costs Per Cubic Yard for Tested Fill	
Assuming analyses is conducted for Target Analyte List Metals, Mercury, Semi-Volatile Organic Compounds, Pesticides, PCBs	
Average cost per sample analyzed of $446*	
Analytical Frequency per cubic yard	Cost ($) per cubic yard
20	$22.30
30	$14.87
100	$4.46
250	$1.78
500	$0.89
1,000	$0.45

Issue: Inconsistency with PC Soil Requirements

The Department has identified an inconsistency in the Soil and Fill amendments wherein Petroleum Contaminated Soil ("PCS") entities do not have to secure licensure by virtue of the fact that these soils are recognized as a Class B recyclable material while other facilities handling regular soils are required to obtain a license.

The Department is considering rule changes that would consider all non-hazardous soils being reused/recycled to be classified a Class B recyclable material, and by extension develop a regulatory structure for the handling of such materials at authorized Class B recycling facilities.



The Department is considering an amendment to the definition of Class B recyclable material to include all non-hazardous soil.

1. Source separated, non-putrescible, waste concrete, asphalt, brick, block, asphalt-based roofing scrap and wood waste;
2. Source separated, non-putrescible, waste materials other than metal, glass, paper, plastic containers, corrugated and other cardboard resulting from construction, remodeling, repair and demolition operations on houses, commercial buildings, pavements and other structures;
3. Source separated whole trees, tree trunks, tree parts, tree stumps, brush and leaves provided that they are not composted;
4. Source separated scrap tires; and
5. Source separated petroleum contaminated soil

Considerations:
Management of Soil

- What methods and challenges would Class B facilities face in segregating and homogenizing soil/fill product of different qualities to be sold?
  - Ex.: Non-Restricted vs. Mildly Contaminated

- How would appropriate end-use be facilitated?

Considerations:
Quality of Soil

- What methods of sampling should be conducted?
- What parameters should soil be sampled for?
  - At what frequency?
- Should sampling requirements cover all end-use?
- What is the preferred method of documentation for sampling and transfer of soil?

Considerations:
Impacts to Existing Market

- What is the experience with purchasing soil/fill from quarries?
  - How does it currently compare in cost to purchasing a comparable soil/fill product from Class B Facilities ?
  - How does it compare in cost to purchasing mildly contaminated soil/fill for use at SRP sites?

Question 1:

Management of Soil

To ensure confidence in the data generated by the sampling and analyses of soil/fill recyclable materials that have been processed at a Class B facility, please indicate which of the following operational issues could be a challenge:

A. Having the ability to homogenize the product such that the sample results will be representative of the material stored.

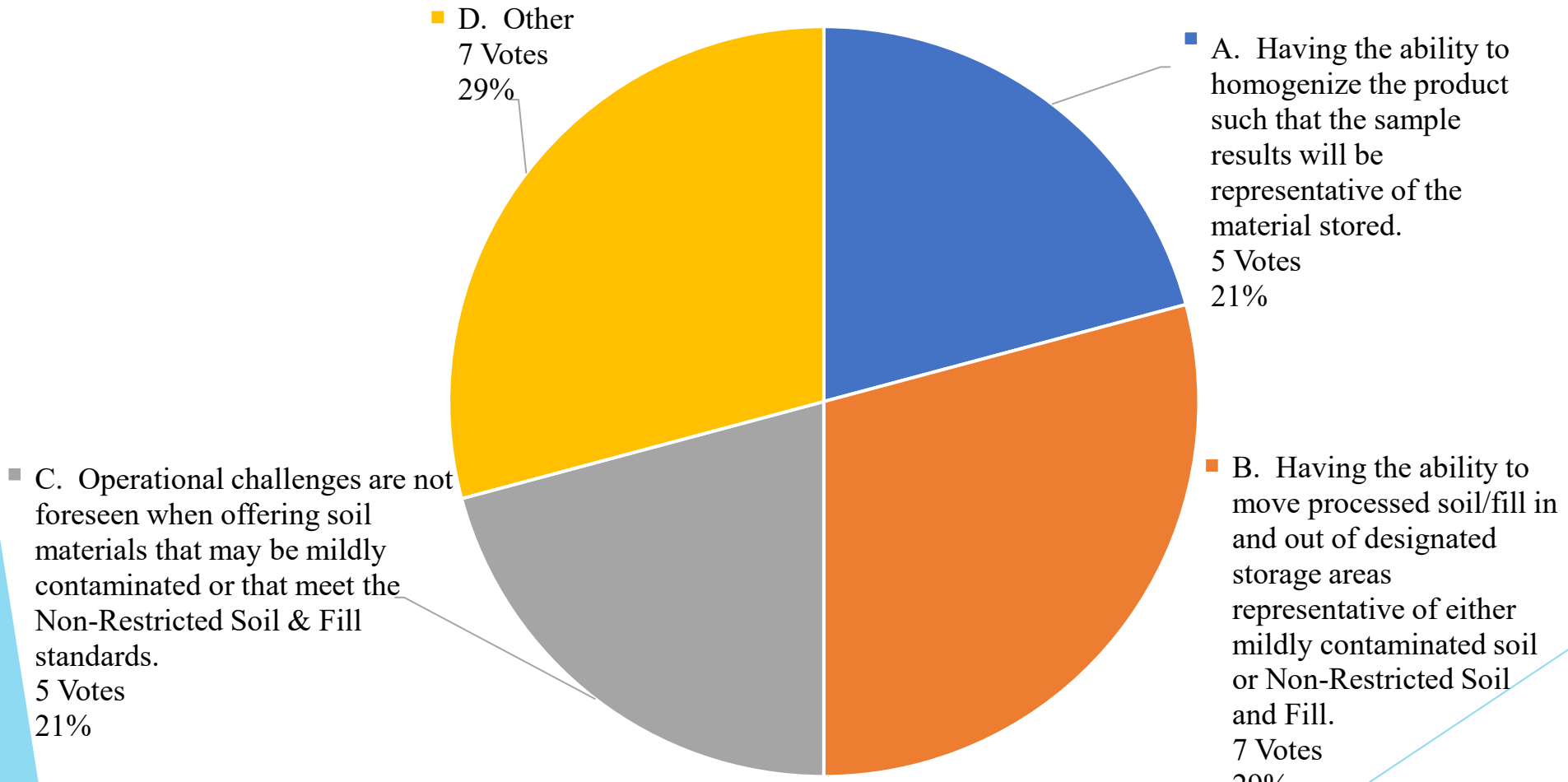
B. Having the ability to move processed soil/fill in and out of designated storage areas representative of either mildly contaminated soil or Non-Restricted Soil and Fill.

C. Operational challenges are not foreseen when offering soil materials that may be mildly contaminated or that meet the Non-Restricted Soil & Fill standards.

D. Other

Results to Question 1:

To ensure confidence in the data generated by the sampling and analyses of soil/fill recyclable materials that have been processed at a Class B facility, please indicate which of the following operational issues could be a challenge:



Question 2:

Sampling of Incoming Material

Should Class B Recycling Approvals have a condition that specifies required sampling and analytical protocols of incoming soil?

A. Yes, such requirements should be prescriptive.

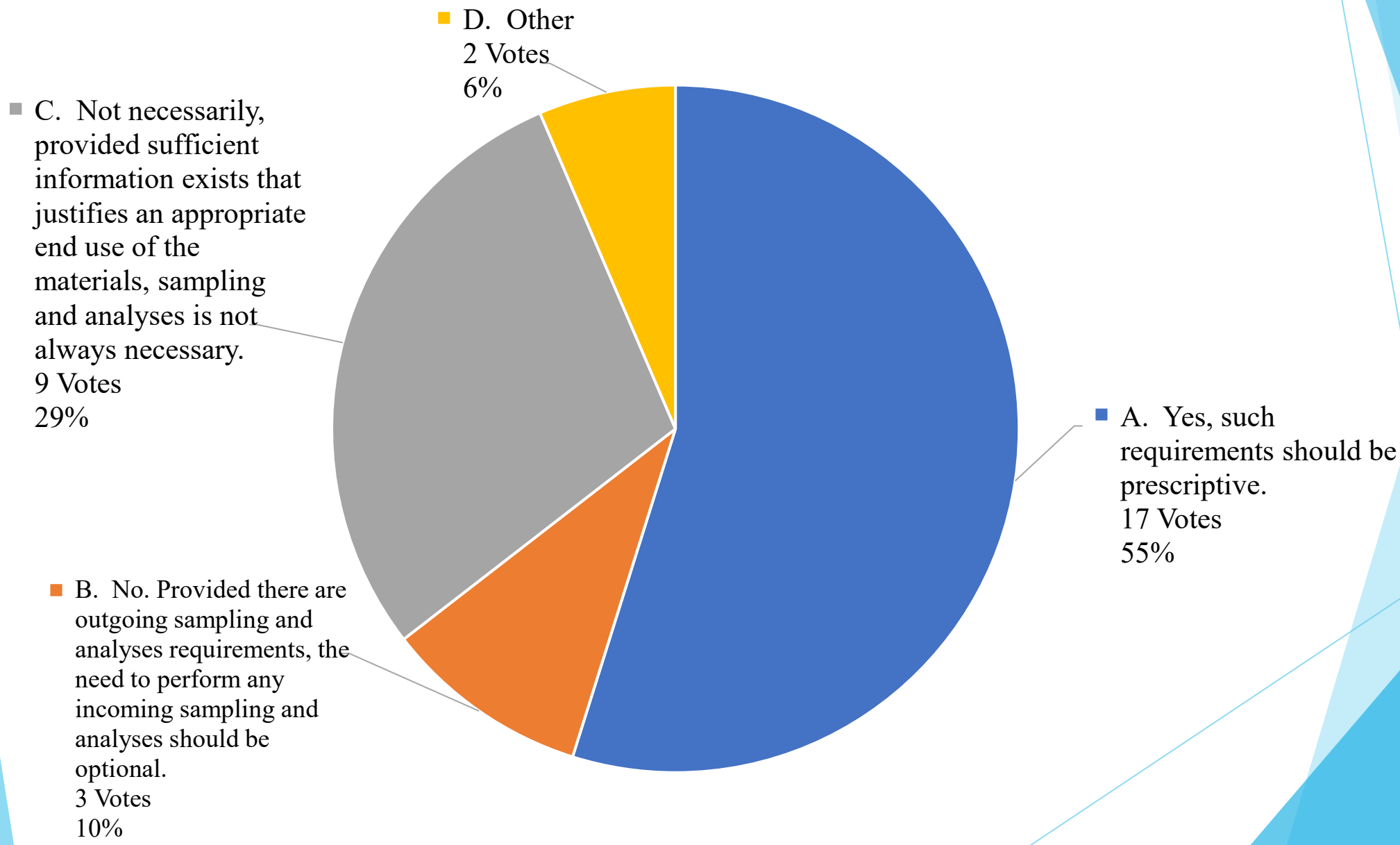
B. No. Provided there are outgoing sampling and analyses requirements, the need to perform any incoming sampling and analyses should be optional.

C. Not necessarily, provided sufficient information exists that justifies an appropriate end use of the materials, sampling and analyses is not always necessary.

D. Other

Results to Question 2:

Should Class B Recycling Approvals have a condition that specifies required sampling and analytical protocols of incoming soil?



Question 3:

Sampling of Outgoing Material

Should Class B Recycling Approvals have a condition that specifies sampling and analytical protocols for outgoing recyclable materials that have been processed at a Class B facility?

A. Yes. Requirements should be prescriptive so that all Class B facilities are competing on an even playing field.

B. No, sampling and analyses should not be required; and the specifics of any sampling should be left up to the Class B facility.

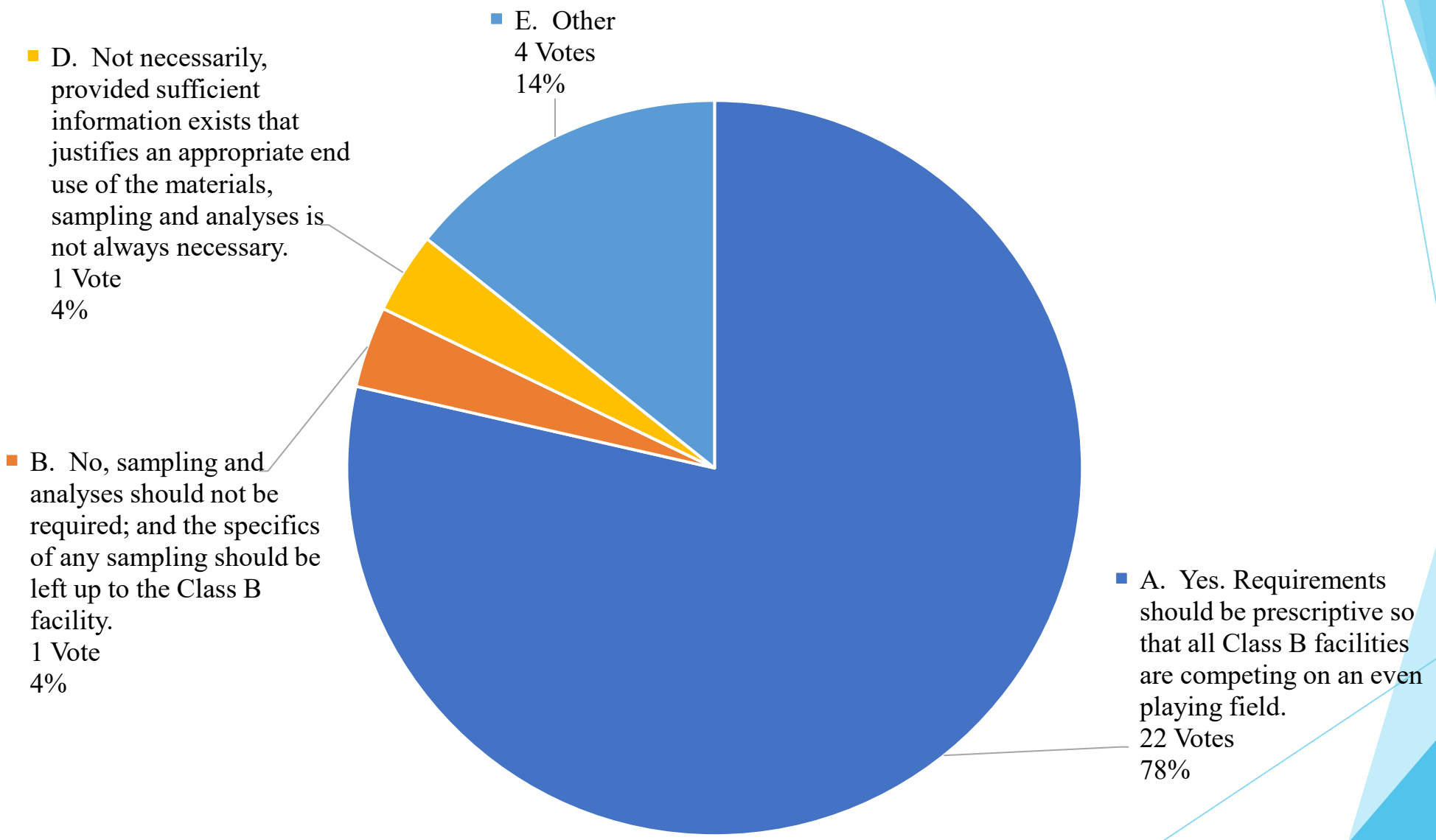
C. No, sampling and analyses should not be required in the Regulations nor the Recycling Approval, but instead in NJDEP Guidance wherein it is up to the Class B facility if they want to follow it in whole or in part.

D. Not necessarily, provided sufficient information exists that justifies an appropriate end use of the materials, sampling and analyses is not always necessary.

E. Other

Results to Question 3:

Should Class B Recycling Approvals have a condition that specifies sampling and analytical protocols for outgoing recyclable materials that have been processed at a Class B facility?



Question 4:

End Use

To ensure that the products being distributed by Class B facilities are appropriate for their customers' use, please note which of the following would facilitate the marketability of soil/fill processed at a Class B Recycling Center:

A. The quality of the soil/fill is documented such that, for areas not undergoing remediation, establishment of an automatic Beneficial Use Determination by Rule for certain soil/fill to be used as road/parking lot/building foundation base materials provided such soil fill meets the like on like and 75th percentile contaminant concentrations as compared to the contaminants within fresh asphalt, the applied thicknesses do not exceed applicable engineering specifications, and, all federal, State and local construction authorizations are in place.

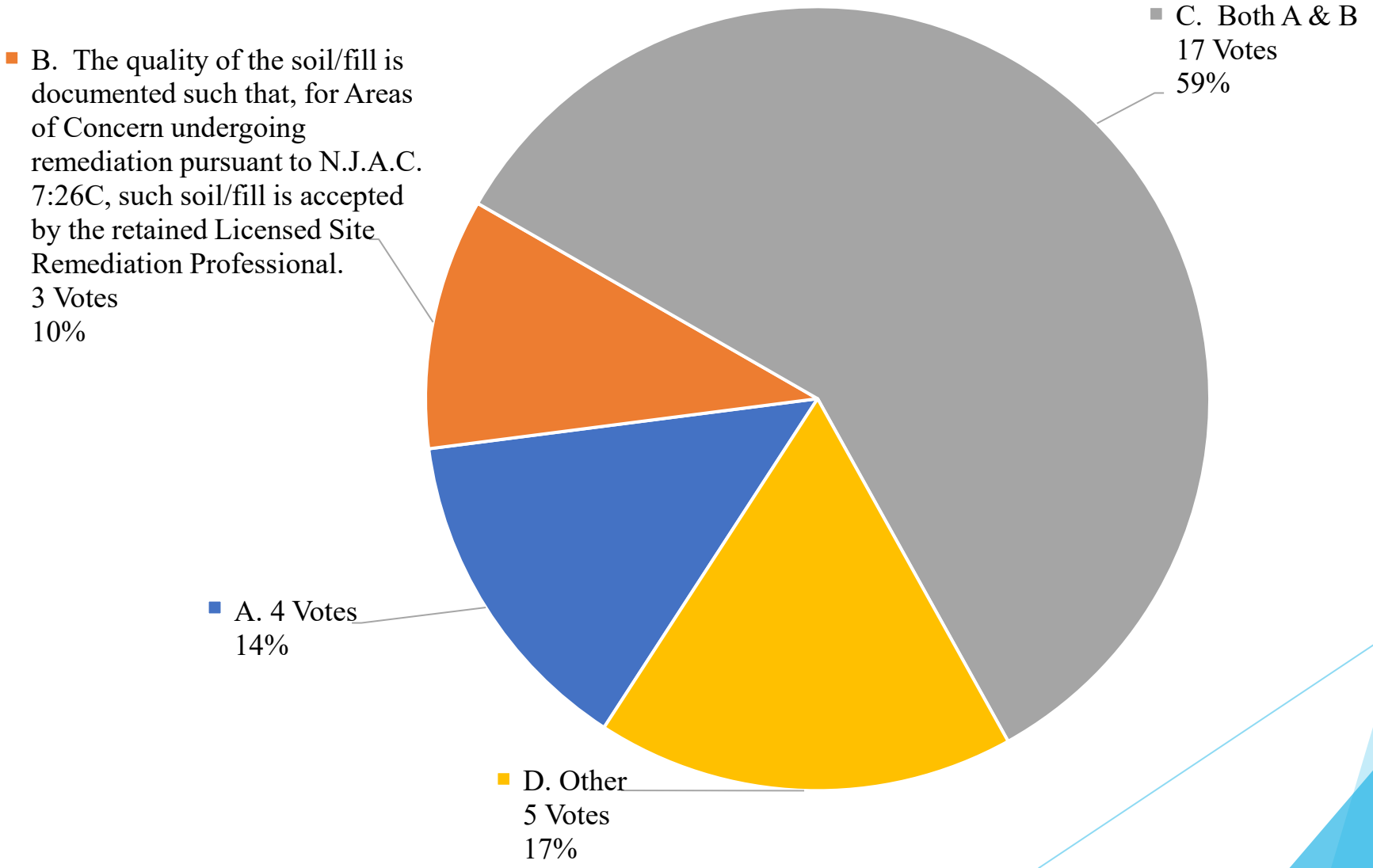
B. The quality of the soil/fill is documented such that, for Areas of Concern undergoing remediation pursuant to N.J.A.C. 7:26C, such soil/fill is accepted by the retained Licensed Site Remediation Professional.

C. Both A & B

D. Other

Results to Question 4:

To ensure that the products being distributed by Class B facilities are appropriate for their customers' use, please note which of the following would facilitate the marketability of soil/fill processed at a Class B Recycling Center:



Question 5:

Analytical (1)

Should Class B facilities that do not import asphalt, concrete, brick, block, ceramic or painted wood be exempted from any sampling and analyses requirements for incoming or outgoing soil/fill?

A. Yes, completely exempted while leaving it up to the facility to determine what precautions they will take.

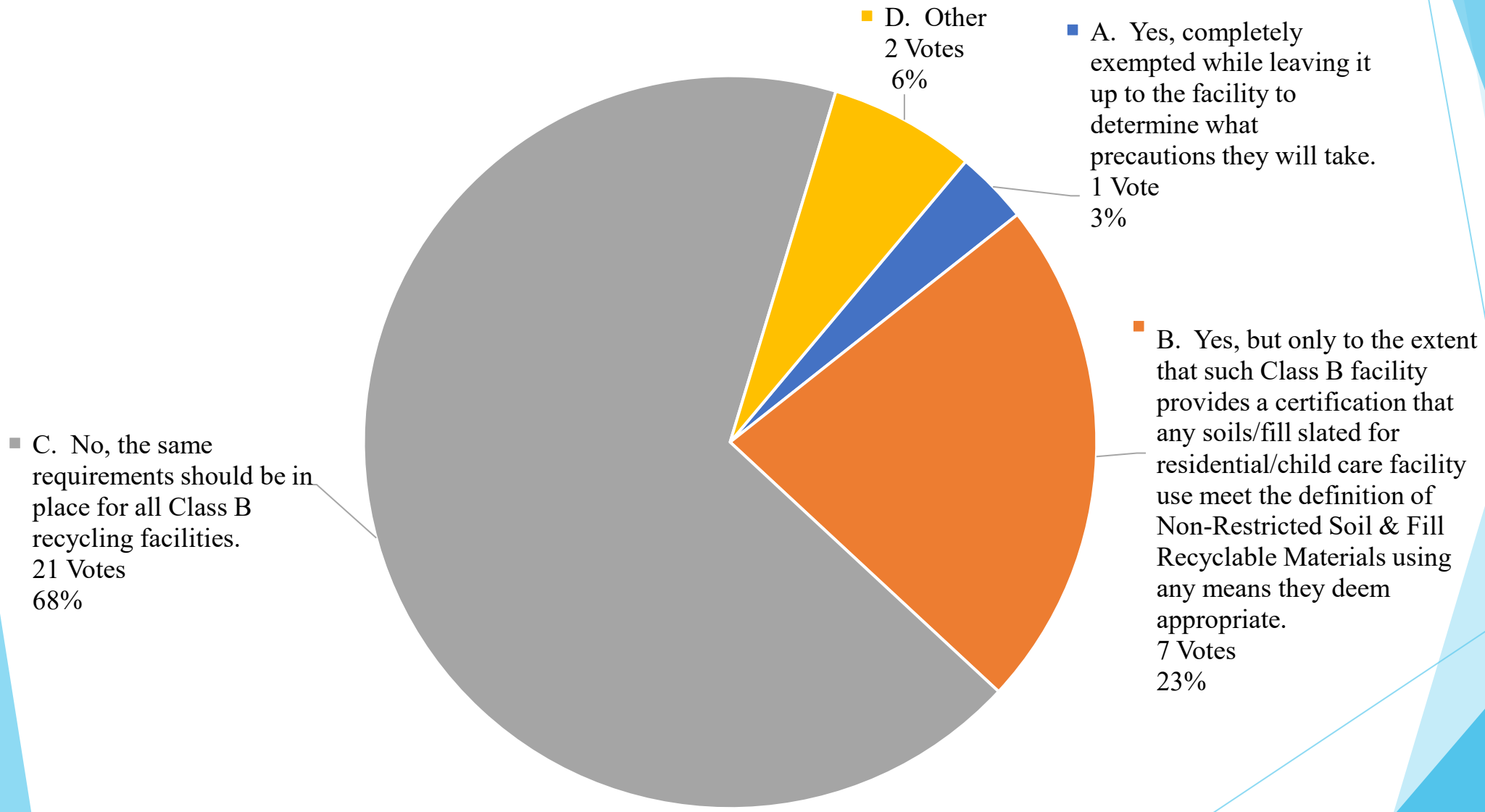
B. Yes, but only to the extent that such Class B facility provides a certification that any soils/fill slated for residential/child care facility use meet the definition of Non-Restricted Soil & Fill Recyclable Materials using any means they deem appropriate.

C. No, the same requirements should be in place for all Class B recycling facilities.

D. Other

Results to Question 5:

Should Class B facilities that do not import asphalt, concrete, brick, block, ceramic or painted wood be exempted from any sampling and analyses requirements for incoming or outgoing soil/fill?



Question 6:

Analytical (2)

What parameters should be used to analyze soil/fill materials processed at a Class B facility?

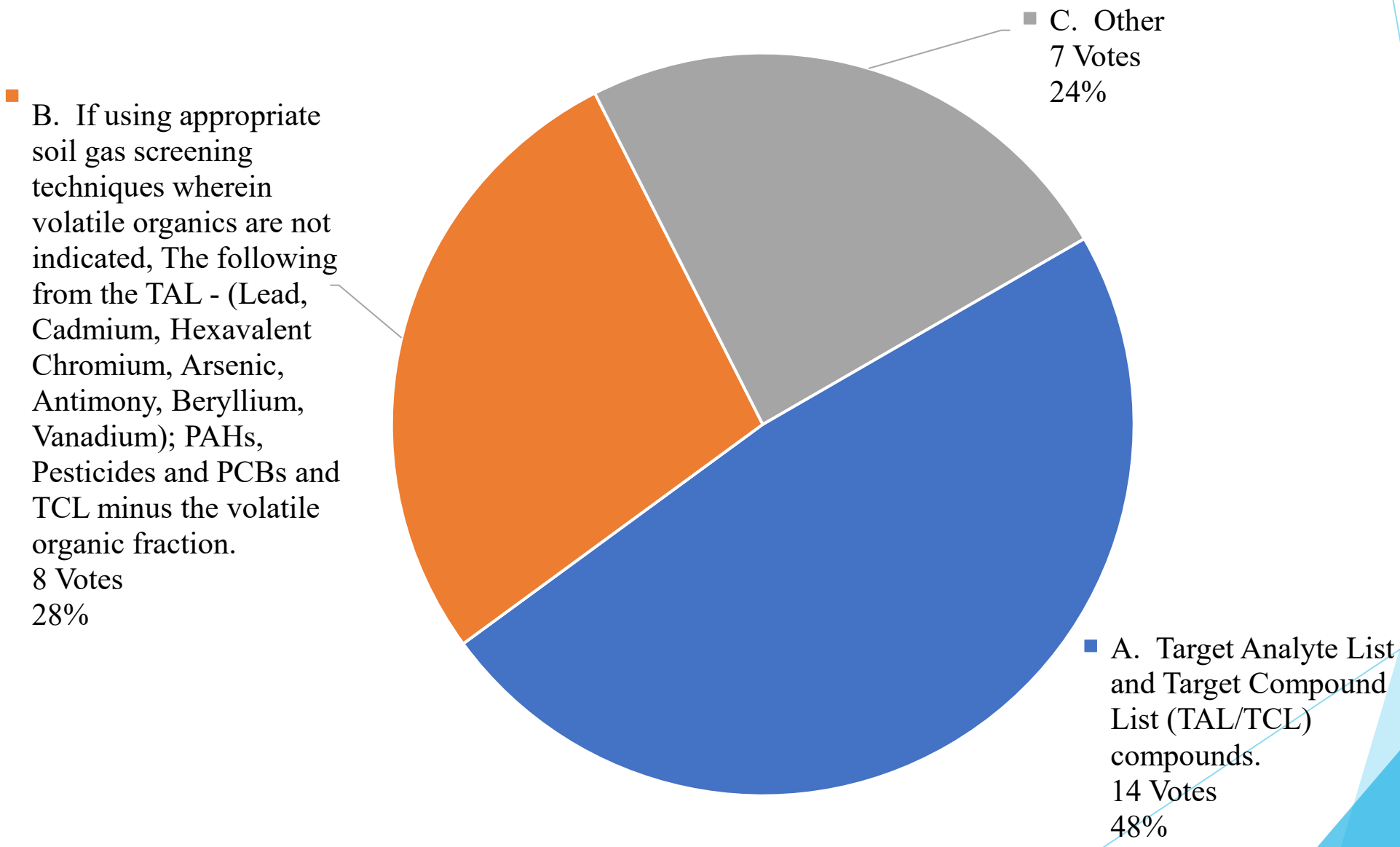
A. Target Analyte List and Target Compound List (TAL/TCL) compounds.

B. If using appropriate soil gas screening techniques wherein volatile organics are not indicated, The following from the TAL - (Lead, Cadmium, Hexavalent Chromium, Arsenic, Antimony, Beryllium, Vanadium); PAHs, Pesticides and PCBs and TCL minus the volatile organic fraction.

C. Other

Results to Question 6:

What parameters should be used to analyze soil/fill materials processed at a Class B facility?



Question 7:

Analytical (3)

For **Residential/Child Care Facility** uses, assuming some sampling and analyses of outgoing soil/fill that has been processed at a Class B recycling facility will be required, what should the analytical frequency be to confirm that the soil/fill meets the definition of Non-Restricted Soil & Fill Recyclable materials?

A. Per the most recent version of the NJDEP Guidance document "Fill Material Guidance for SRP Sites".

B. One sample analyzed per every 20 cubic yards.

C. One sample analyzed per every 100 cubic yards.

D. One sample analyzed per every 250 cubic yards.

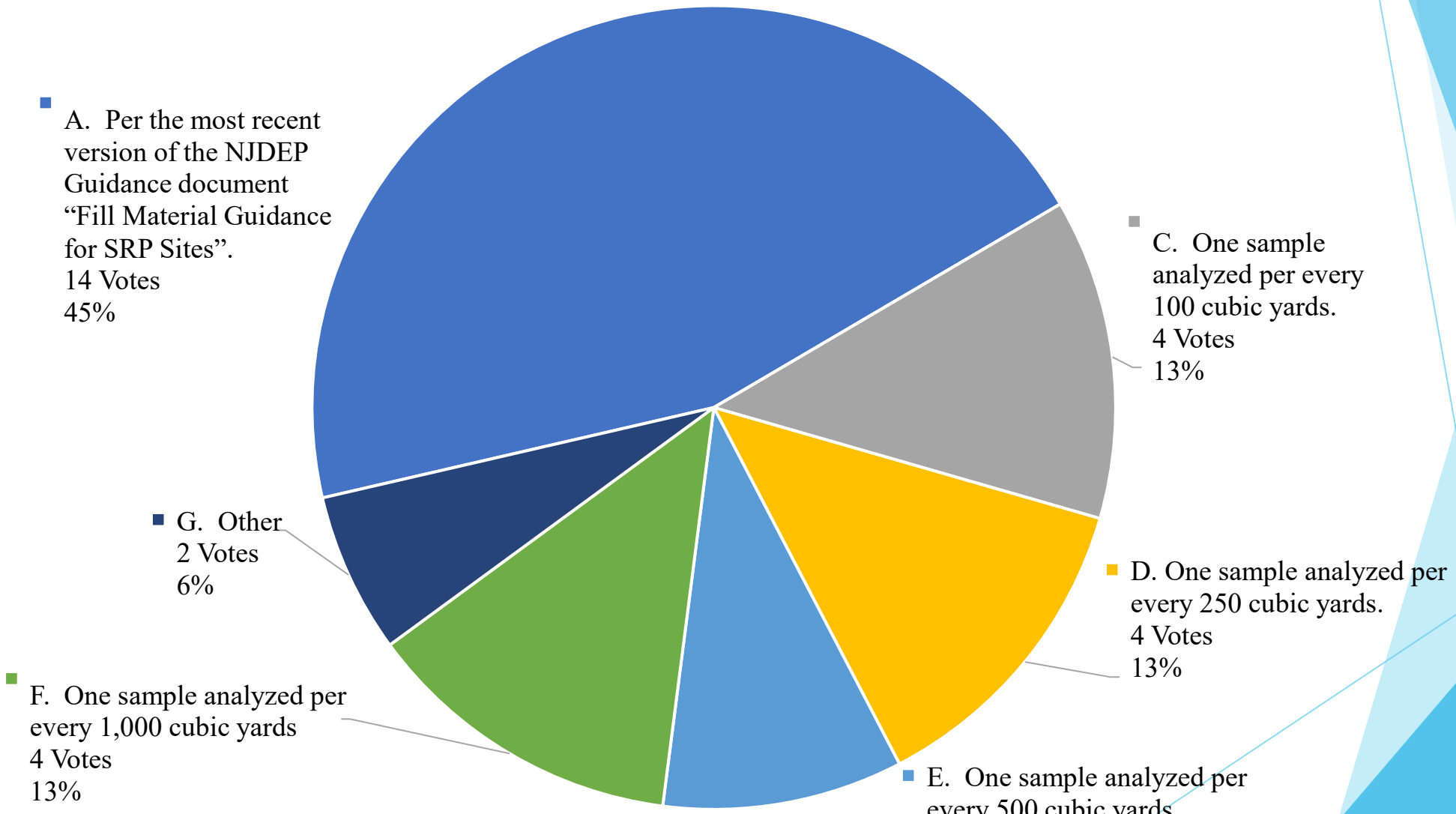
E. One sample analyzed per every 500 cubic yards.

F. One sample analyzed per every 1,000 cubic yards

G. Other: One sample analyzed per every _____ cubic yards.

Results to Question 7:

For **Residential/Child Care Facility** uses, assuming some sampling and analyses of outgoing soil/fill that has been processed at a Class B recycling facility will be required, what should the analytical frequency be to confirm that the soil/fill meets the definition of Non-Restricted Soil & Fill Recyclable materials?



Question 8:

Analytical (4)

For **Non-Residential/Non-Child Care Facility** uses, assuming some sampling and analyses of outgoing soil/fill that has been processed at a Class B recycling facility will be required, what should the analytical frequency be to document the quality of the soils/fill that may be mildly contaminated?

A. Per the most recent version of the NJDEP "Fill Material Guidance for SRP Sites".

B. One sample analyzed per every 300 cubic yards.

C. One sample analyzed per every 500 cubic yards.

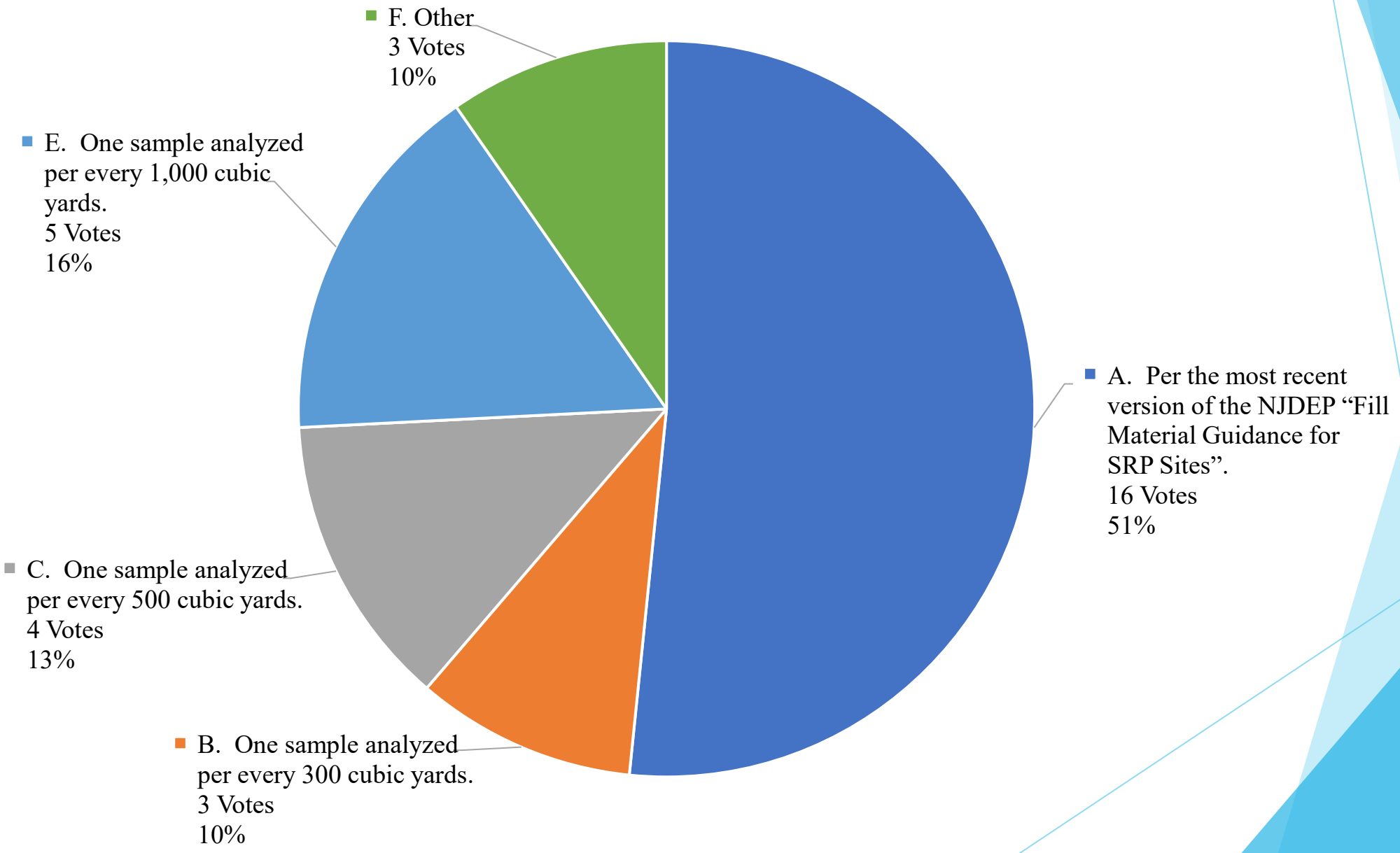
D. One sample analyzed per every 800 cubic yards.

E. One sample analyzed per every 1,000 cubic yards.

F. Other: One sample analyzed per every _____ cubic yards.

Results to Question 8:

For **Non-Residential/Non-Child Care Facility** uses, assuming some sampling and analyses of outgoing soil/fill that has been processed at a Class B recycling facility will be required, what should the analytical frequency be to document the quality of the soils/fill that may be mildly contaminated?



Question 9:

Quality Assurance / Quality Control

Which of the following Quality Assurance/Quality Control (QA/QC) provisions should be required to support analytical data of soil/fill recyclable materials?

A. Reduced Laboratory Data Deliverables as defined in N.J.A.C. 7:26E - 1.8.

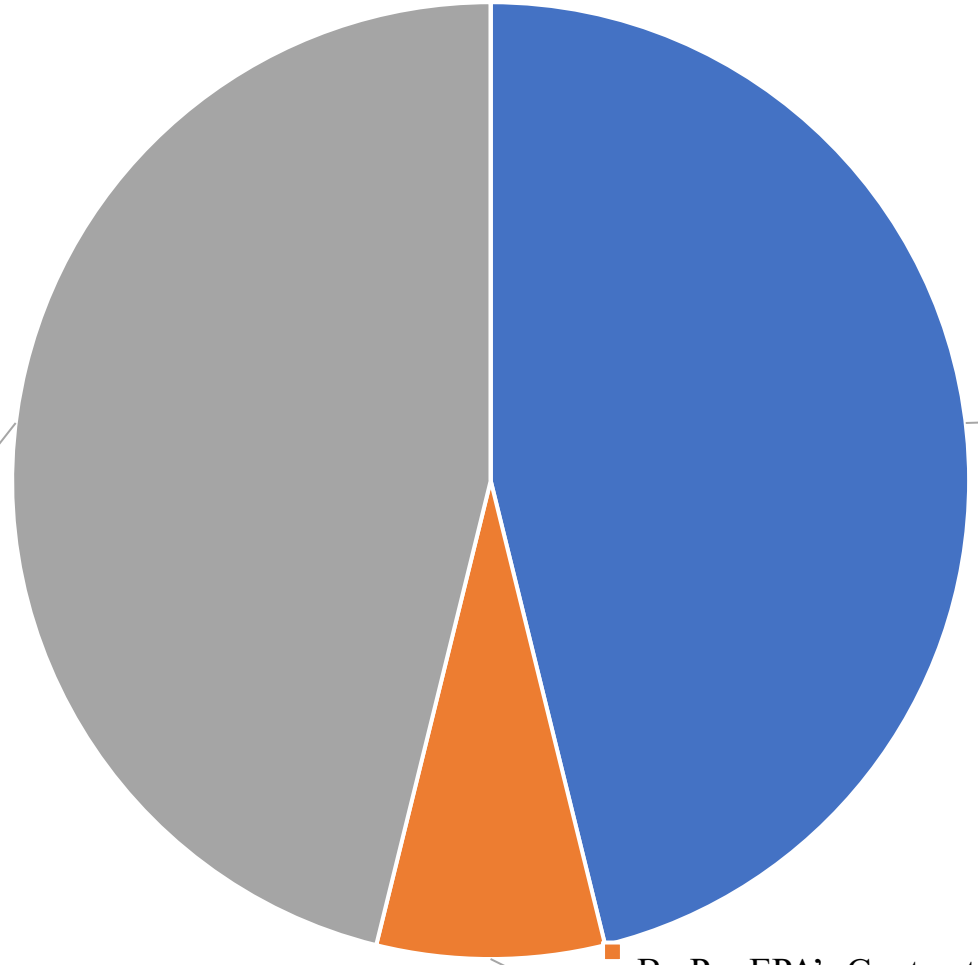
B. Per EPA's Contract Laboratory Program's most recent Statement of Work.

C. Provided a New Jersey certified laboratory is used, there should not be a requirement for QA/QC data.

D. Other

Results to Question 9:

Which of the following Quality Assurance/Quality Control (QA/QC) provisions should be required to support analytical data of soil/fill recyclable materials?



C. Provided a New Jersey certified laboratory is used, there should not be a requirement for QA/QC data.
12 Votes
46%

A. Reduced Laboratory Data Deliverables as defined in N.J.A.C. 7:26E - 1.8.
12 Votes
46%

B. Per EPA's Contract Laboratory Program's most recent Statement of Work.
2 Votes
8%

Question 10:

Documentation

To ensure confidence in the data generated by the sampling and analyses of soil/fill recyclable materials that have been processed at a Class B facility, please indicate which of the following operational issues could be a challenge:

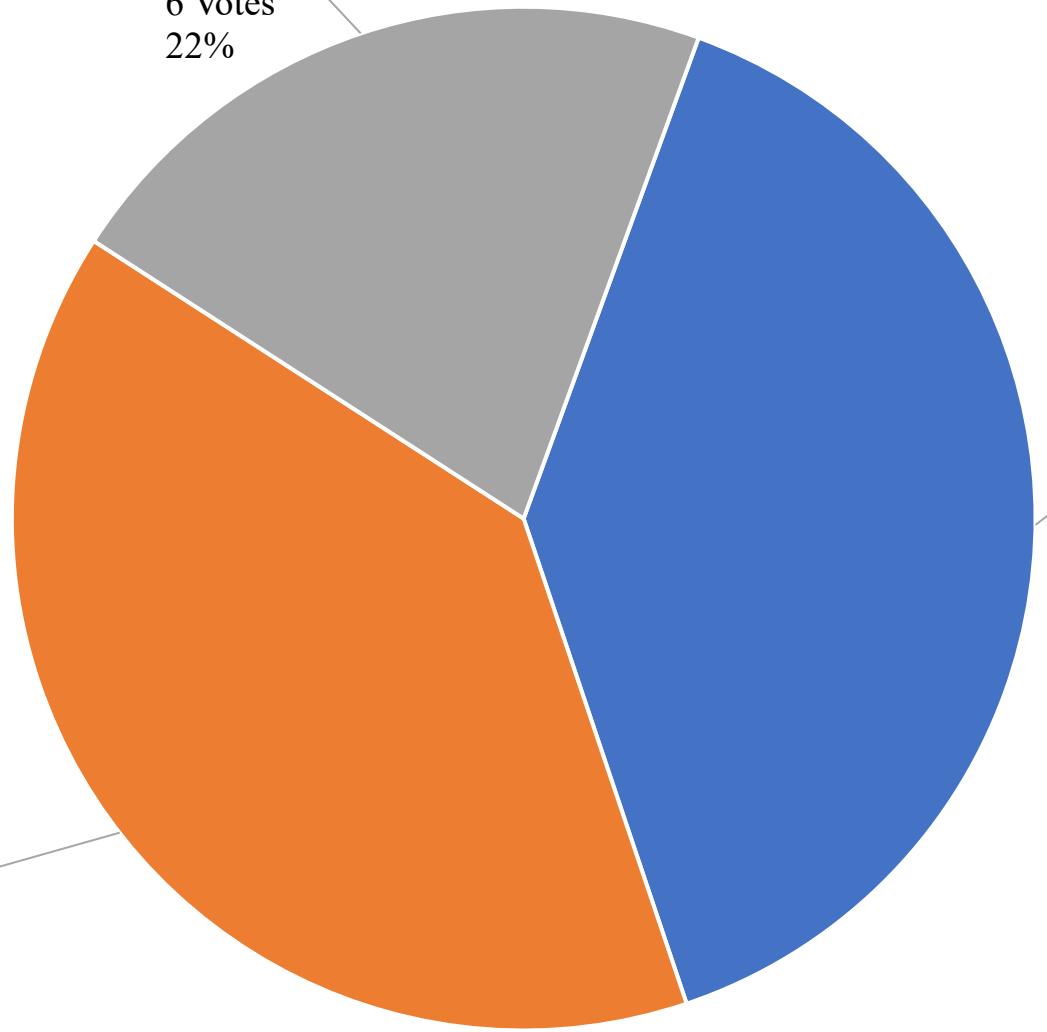
A. Each sale of soil/fill that does not meet the definition of Non-Restricted Soil & Fill Recyclable materials should be accompanied with a notice that such materials may not be suitable for use in residential/child care settings.

B. Each sale of soil/fill that does not meet the definition of Non-Restricted Soil & Fill shall be completed only upon receipt of a document from the Department acknowledging the appropriateness of the designated use, or the existence of any regulation, rule, or permit that acknowledges the same.

C. Other

Results to Question 10:

To ensure confidence in the data generated by the sampling and analyses of soil/fill recyclable materials that have been processed at a Class B facility, please indicate which of the following operational issues could be a challenge



Existing Recycling Exemption #20

The Department is considering to amend the existing recycling exemption #20 found under N.J.A.C. 7:26A-1.4(a) to include all non-hazardous soil.

The Department is considering allowing soils generated by a demolition contractor to be brought back to their construction yard under certain volume restrictions for use on their construction projects, excluding re-sale.

N.J.A.C. 7:26A-1.4(a)20 encompasses the receipt, storage, processing, and transfer for any construction company or contractor which through the course of construction and demolition activities generates source separated concrete, asphalt, brick, and block. The company or contractor that operates this exemption shall be the sole end-user or end-market of the product that is generated.

Question 11:

Exemption #20 Sampling Requirements

Should outgoing materials from the contractor's yard under this exemption comply with the sampling and analytical requirements noted for Class B facilities that handle construction and demolition debris and soils?

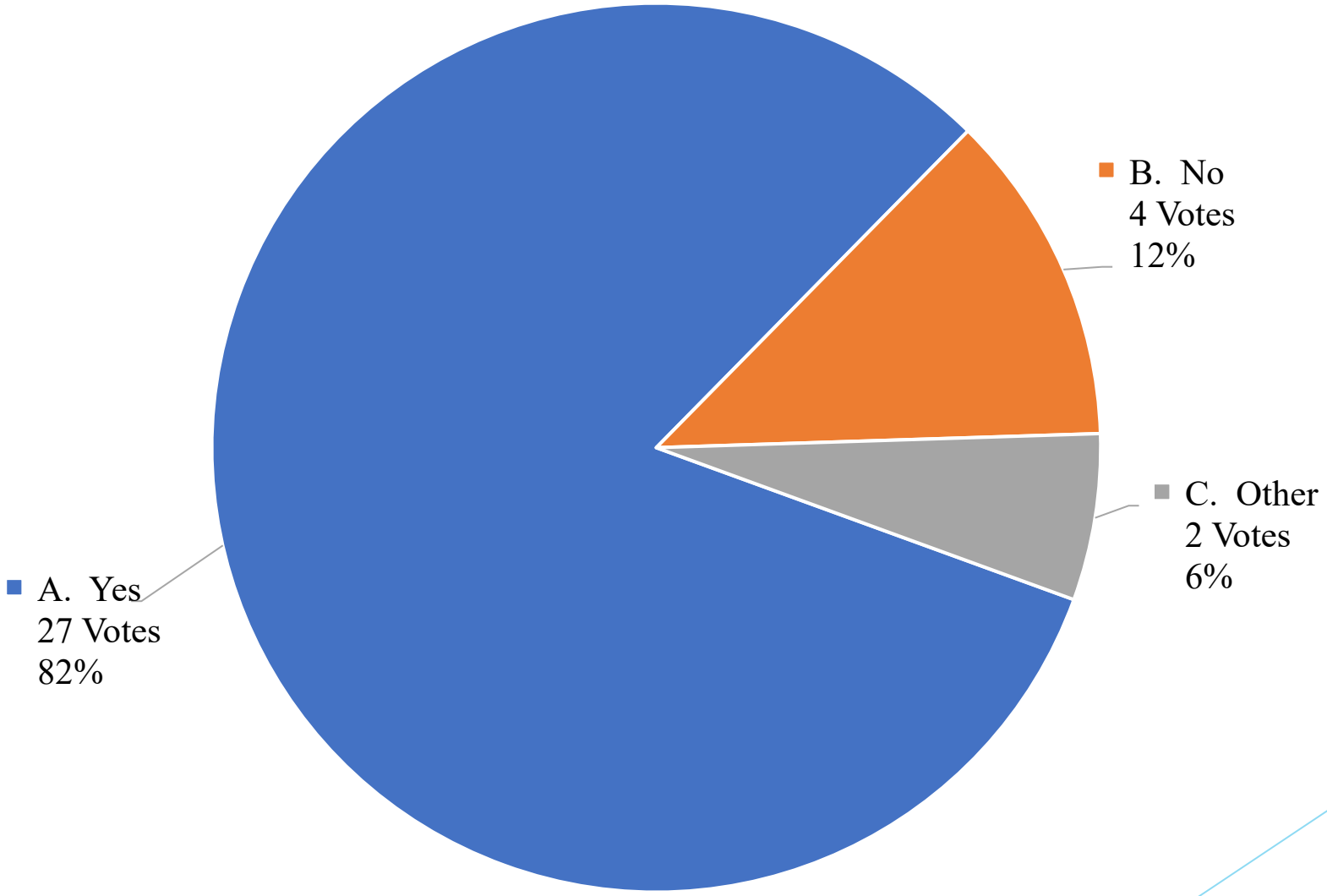
A. Yes

B. No

C. Other

Results to Question 11:

Should outgoing materials from the contractor's yard under this exemption comply with the sampling and analytical requirements noted for Class B facilities that handle construction and demolition debris and soils?



Consideration for a New Recycling Exemption for Soil Processors not Operating a Class B facility

The Department is considering offering a new Exemption to N.J.A.C. 7:26A-1.4(a) for entities that do not import construction and demolition debris, tree parts, brush, leaves or grass but may import blending materials to manufacture either fill dirt or topsoil.

Question 12:
Recycling Exemption Consideration

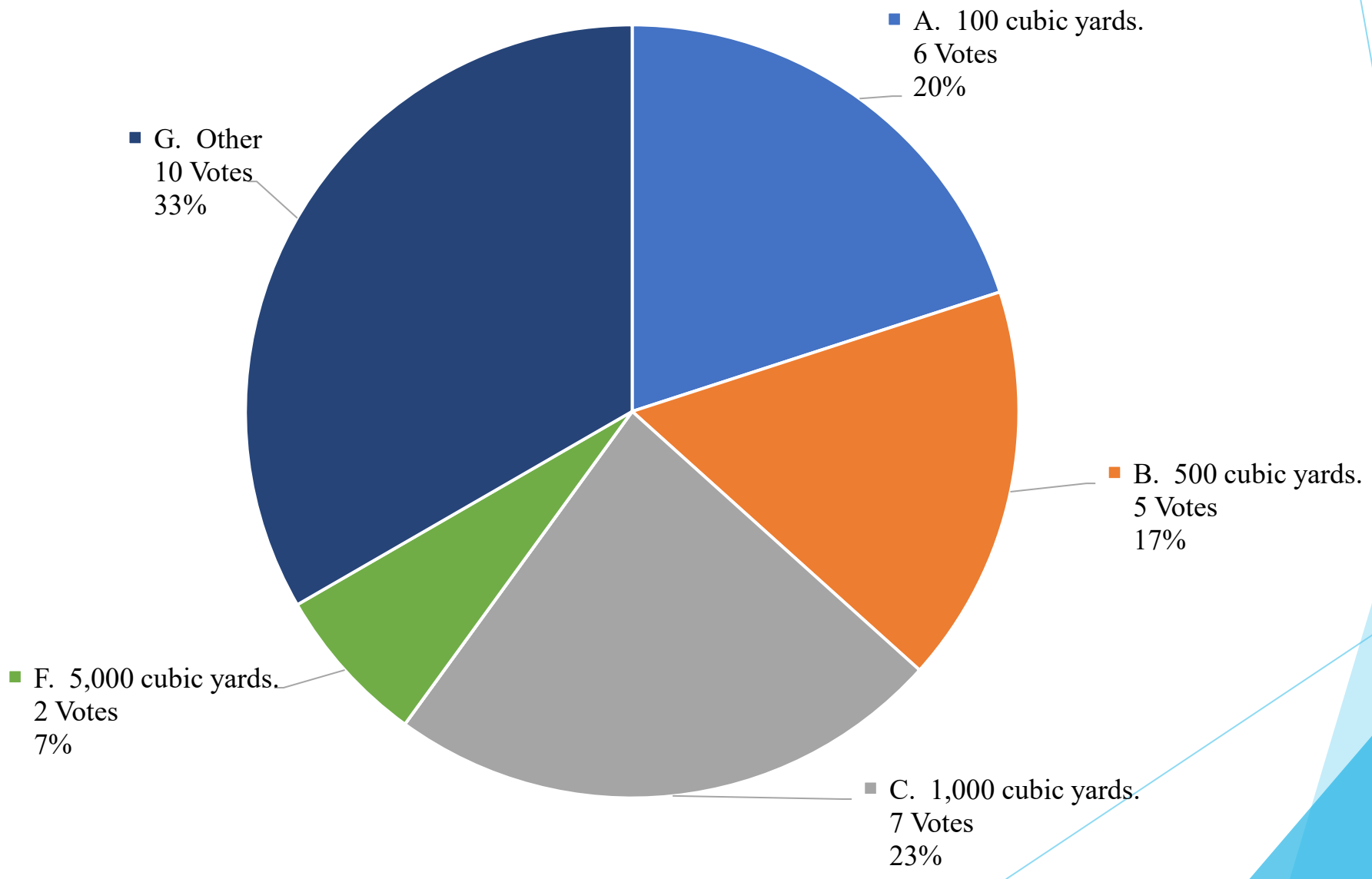
Volume Limit

What should the volume limit of such Exemption be considering both processed and unprocessed (feedstock) materials combined?

A. 100 cubic yards.
B. 500 cubic yards.
C. 1,000 cubic yards.
D. 2,500 cubic yards.
E. 3,500 cubic yards.
F. 5,000 cubic yards.
G. Other: _____cubic yards.

Results to Question 12:

What should the volume limit of such Exemption be considering both processed and unprocessed (feedstock) materials combined?



Question 13:
Recycling Exemption Consideration

Sampling of Outgoing Material (1)

Should the Exemption for such soil processing facilities have a condition that specifies sampling and analytical protocols for outgoing products?

A. Yes, the requirements should be prescriptive so that all such facilities are competing on an even playing field.

B. Sampling and analyses should be required, however, the specifics should be left up to the soil processing facility.

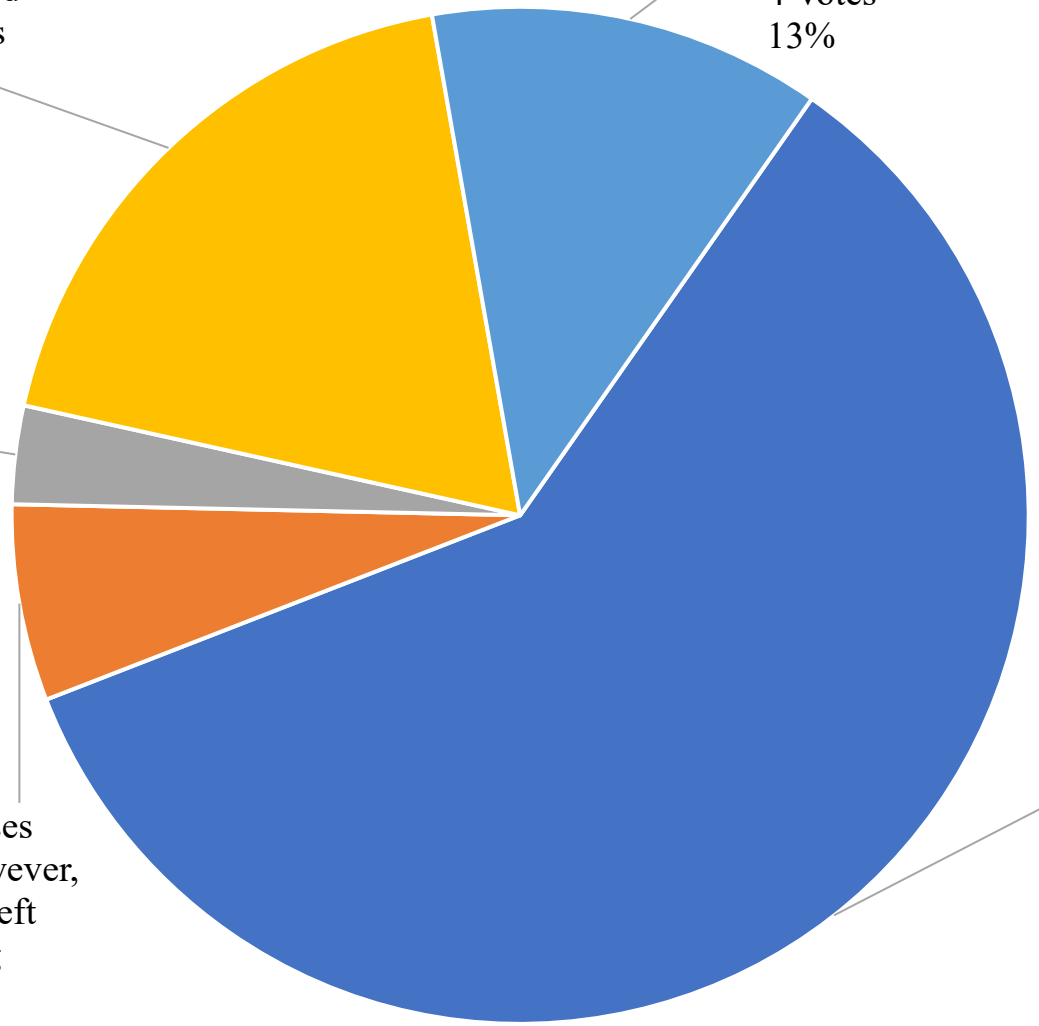
C. Sampling and analyses should be required, however, neither in the regulations nor the Exemption, but in NJDEP Guidance wherein it is up to such processing facility if they want to follow it in whole or in part.

D. Not necessarily, provided sufficient information exists that justifies an appropriate end use of the fill dirt or topsoil, sampling and analyses is not always necessary.

E. Other

Results to Question 13:

Should the Exemption for suh soil processing facilities have a condition that specifies sampling and analytical protocols for outgoing products?



- E. Other
  4 Votes
  13%
- D. Not necessarily, provided sufficient information exists that justifies an appropriate end use of the fill dirt or topsoil, sampling and analyses is not always necessary.
  6 Votes
  19%
- C. Sampling and analyses should be required, however, neither in the regulations nor the Exemption, but in NJDEP Guidance wherein it is up to such processing facility if they want to follow it in whole or in part.
  1 Vote
  3%
- B. Sampling and analyses should be required. However, the specifics should be left up to the soil processing facility.
  2 Votes
  6%
- A. Yes, the requirements should be prescriptive so that all such facilities are competing on an even playing field.
  19 Votes
  59%

Question 14:
Recycling Exemption Consideration

Sampling of Outgoing Material (2)

Should there be sampling and analytical testing requirements for the outgoing materials?

A. Yes, consistent with the most recent version of the Fill Materials Guidance Document for SRP Sites.

B. Yes, at one sample analyzed for every 100 cubic yards.

C. Yes, at one sample analyzed for every 500 cubic yards.

D. Yes, at one sample analyzed for every 1,000 cubic yards.

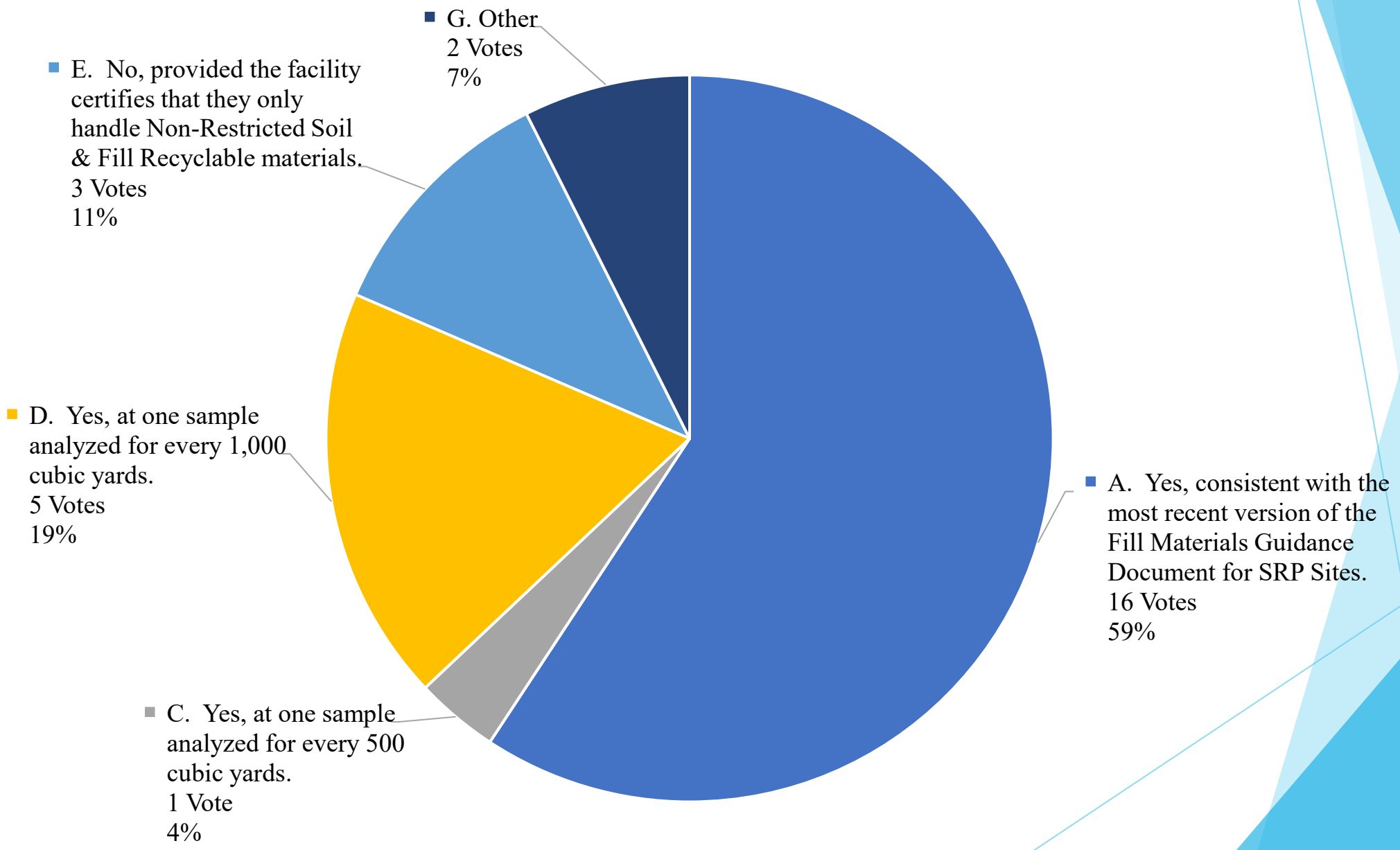
E. No, provided the facility certifies that they only handle Non-Restricted Soil & Fill Recyclable materials.

F. No, provided the facility is governed by a NJPDES permit.

G. Other

Results to Question 14:

Should there be sampling and analytical testing requirements for the outgoing materials?



Question 15:
Recycling Exemption Consideration

Feedstock Materials

Should unprocessed (feedstock) materials be allowed to be mildly contaminated if the final product meets the definition of Non-Restricted Soil & Fill Recyclable Materials?

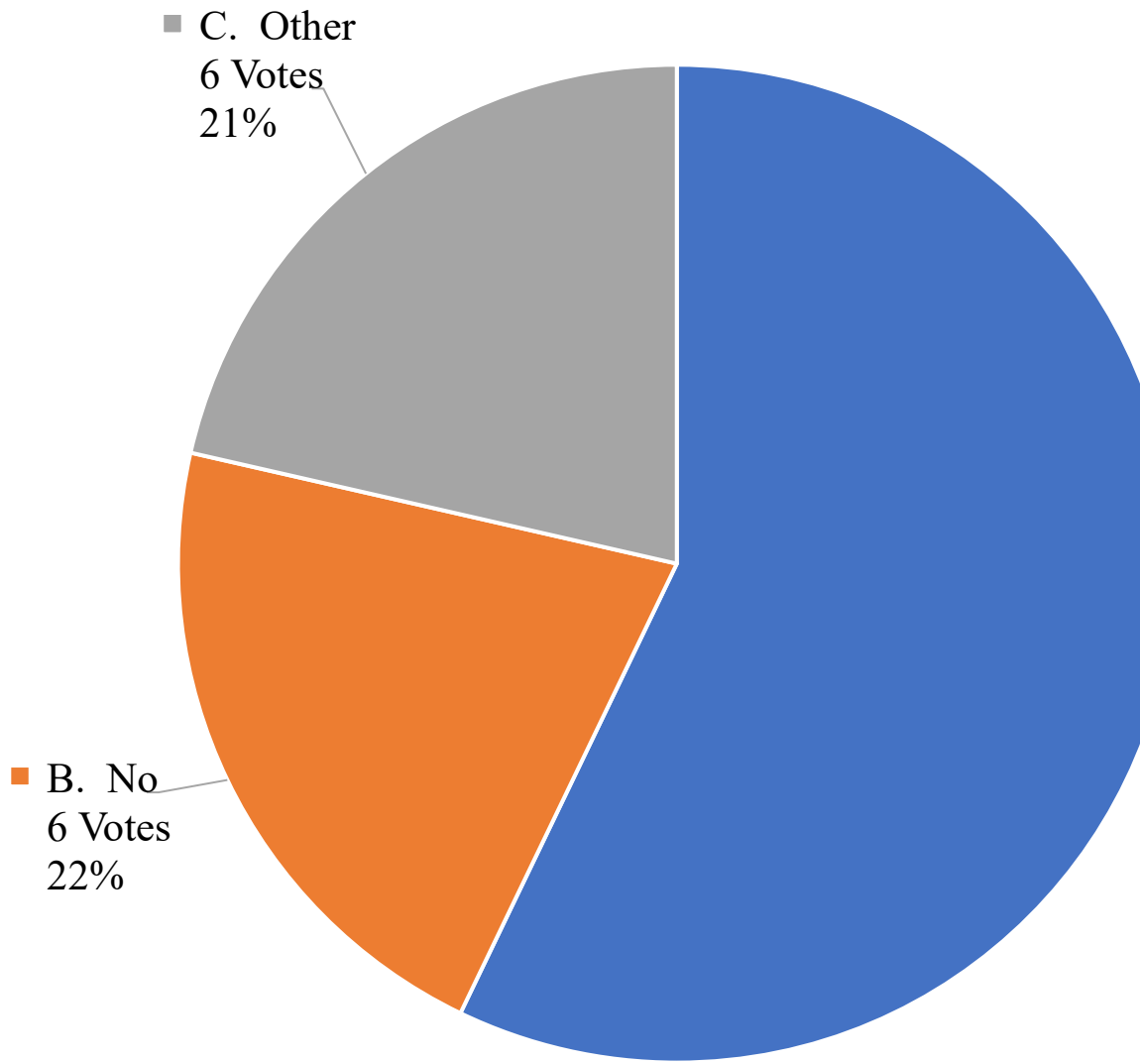
A. Yes

B. No

C. Other

Results to Question 15:

Should unprocessed (feedstock) materials be allowed to be mildly contaminated if the final product meets the definition of Non-Restricted Soil & Fill Recyclable Materials?



Question 16:
Recycling Exemption Consideration

QA/QC

Which of the following Quality Assurance/Quality Control provisions should be required to support analytical data of soil/fill materials?

A. Reduced Laboratory Data Deliverables as defined in N.J.A.C. 7:26E - 1.8.

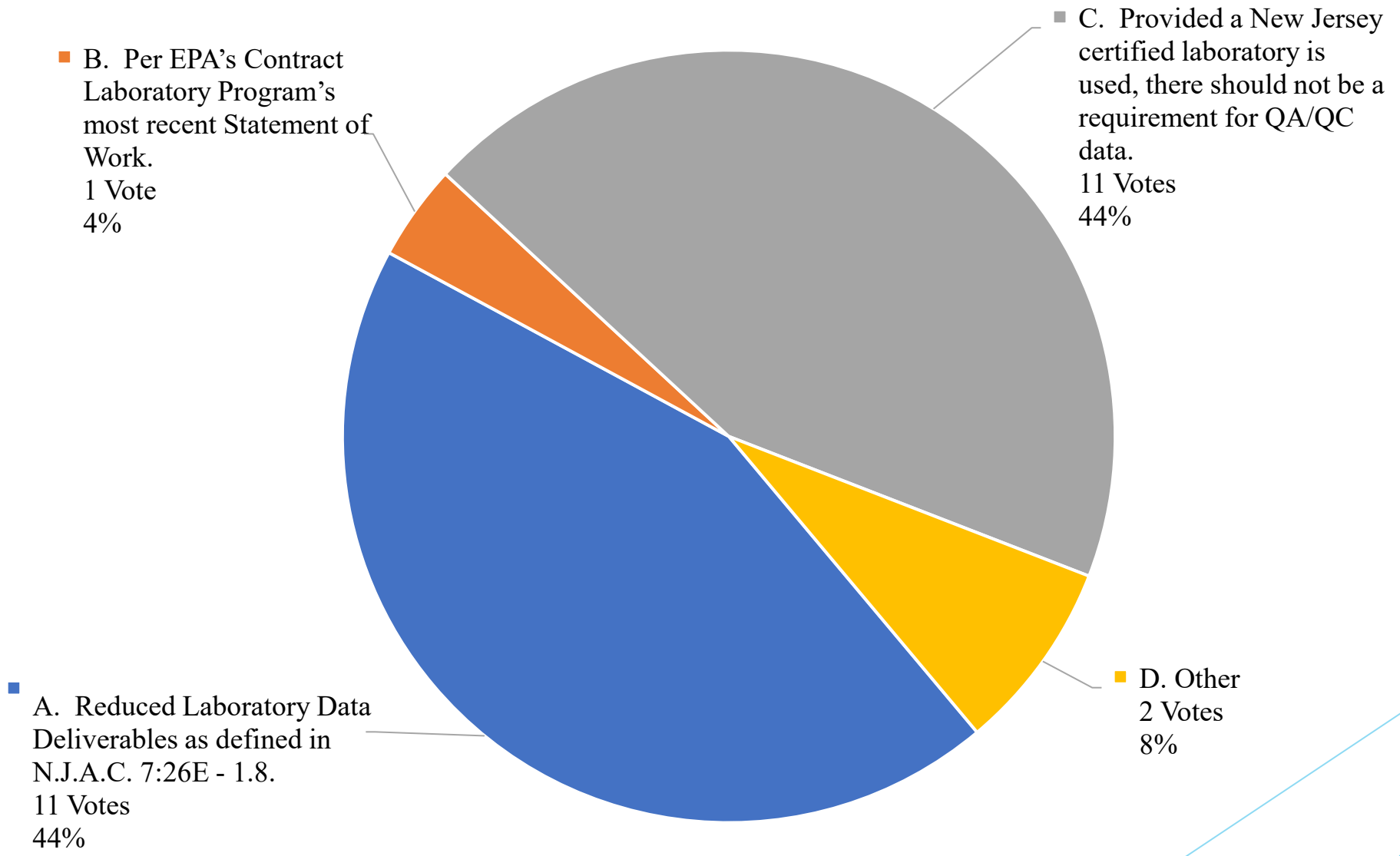
B. Per EPA's Contract Laboratory Program's most recent Statement of Work.

C. Provided a New Jersey certified laboratory is used, there should not be a requirement for QA/QC data.

D. Other

Results to Question 16:

Which of the following Quality Assurance/Quality Control provisions should be required to support analytical data of soil/fill materials?



Question 17:
Recycling Exemption Consideration

Analytical Parameters

What parameters should be used to analyze soil/fill materials at a soil processing facility?

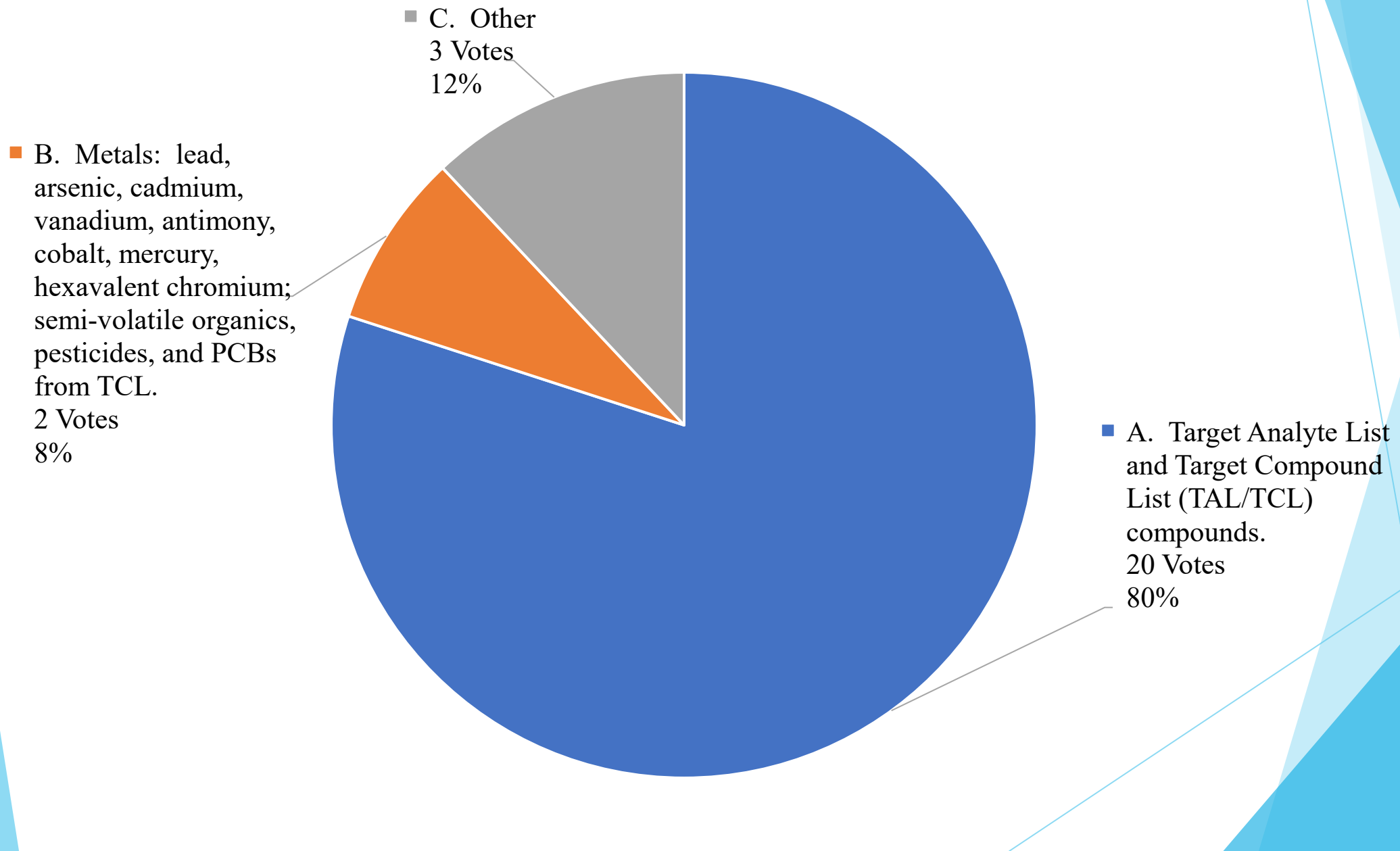
A. Target Analyte List and Target Compound List (TAL/TCL) compounds.

B. Metals: lead, arsenic, cadmium, vanadium, antimony, cobalt, mercury, hexavalent chromium; semi-volatile organics, pesticides, and PCBs from TCL.

C. Other

Results to Question 17:

What parameters should be used to analyze soil/fill materials at a soil processing facility?



Discussion, Q&A, Additional Questions

Openly discuss to elaborate on anything that was shown.

Tell us if you see any additional poll questions we could have asked.

Closing Remarks

- **Thank you for your input!**
  - Summaries of the topics covered at the meeting and relevant information will be made available following the meetings at: NJDEP| Workgroups | Stakeholder Workgroup and Public Meetings
- Please direct any additional feedback via email to: recyclingfacilities@dep.nj.gov