



GREEN AMERICA
**CLEAN ELECTRONICS
PRODUCTION NETWORK**
A project of the Center for Sustainability Solutions

CEPN Round 3 Proposed Priority Chemicals

***FOR STAKEHOLDER
CONSULTATION***

February 2026

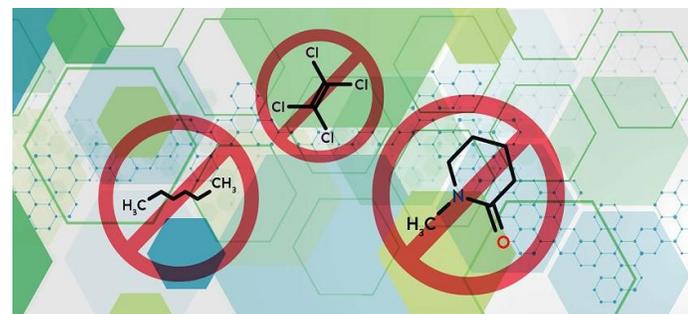
Approved Round 3 Design Principles & Focus Area

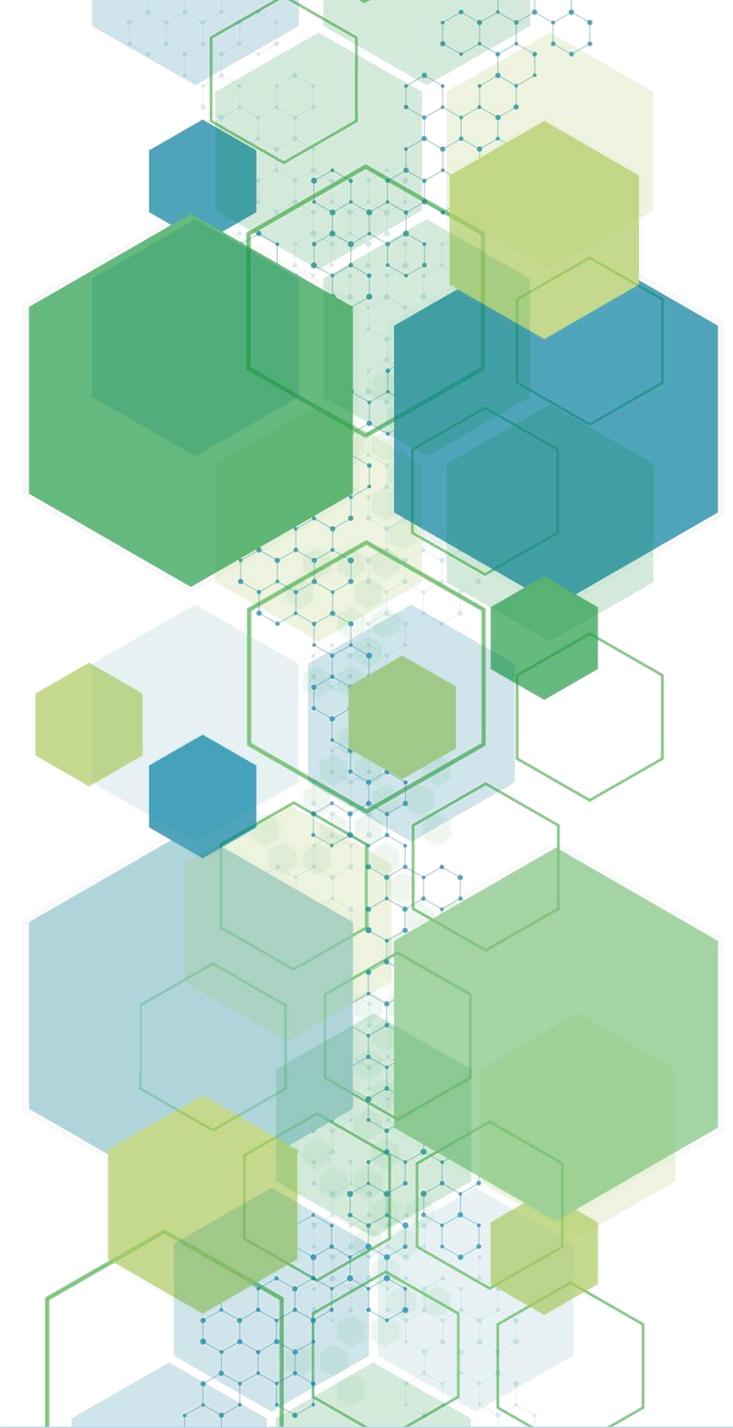
Design Principles for Round 3

1. Reasonable number of Priority Chemicals in the final list (between 5 and 15)
2. Chemicals with specific CAS numbers (not families/classes of chemicals)
3. Chemicals with high hazard and inherent properties that may contribute to high exposure potential and used as, or in, chemical products
4. Align with companies' MRSLs as well as process chemicals with reported use
5. Availability of viable safer alternatives
6. Within the scope of CEPN (process chemicals & potential worker exposure)

Focus Area for Round 3

Solvents used as process chemicals (as defined) in electronics manufacturing (*in alignment with Rounds 1 and 2*)





TRB Recommendations

Priority Chemicals

Priority Chemicals – Process chemicals to be prioritized for elimination or substitution in electronics manufacturing and serve as an MRSL

- Used within the selected focus area(s), if any
- Meets CEPN High Hazard Criteria
- Some indication of current use as a process chemical, or evidence of historical use, within the electronics industry
- Some indication of potentially viable safer alternatives available

NOTE: RBA's Industry Focused Process Chemical (IFPC) List now includes both CEPN's Round 1 and Round 2 Priority Chemicals.

TRB Recommendations: Priority Chemicals

	Chemical	CAS
1	1,1-Dichloroethane	75-34-3
2	1,1-Dichloroethylene	75-35-4
3	1,2-Dichloropropane	78-87-5
4	1-Ethylpyrrolidin-2-one; NEP	2687-91-4
5	Hydrotreated light straight run (petroleum)	64742-49-0
6	Ligroine (petroleum naphtha)	8032-32-4
7	2-(2-Methoxyethoxy)ethanol; DEGME	111-77-3
8	2-Methoxyethyl acetate; Ethylene glycol monomethyl ether acetate	110-49-6
9	N,N-Dimethylacetamide; DMAC	127-19-5
10	1,1,2-Trichloroethane	79-00-5

- Higher priority based on greater inherent exposure potential, **and**
- Indication of current use from PCDC inventories and/or Input Forms, or evidence of historical use, **and**
- Some indication of potentially viable safer alternatives

Watch/Candidate List

Watch/Candidate List – High-hazard process chemicals that should be monitored and considered for Priority Chemicals in a future round if new relevant data emerges about their use and/or safer alternatives, sending a clear signal to chemical formulators and electronics companies to accelerate development and uptake of safer alternatives

- Includes chemicals of concern with insufficient information on use or availability of safer alternatives for definitive selection
- May include chemicals without potentially viable safer alternatives
- Chemicals on this list may transition to Priority Chemicals in the future if sufficient data supports their prioritization for phase-out

TRB Recommendations: Watch/Candidate List

- No clear indication of current use, OR
- Higher or lower priority based on inherent exposure potential, with no indication of potentially viable safer alternatives, OR
- Lower-priority petroleum distillates, based on inherent exposure potential

	Chemical	CAS	Explanation/Notes
1	2-Butanone oxime; Methyl ethyl ketoxime	96-29-7	No indication of potentially viable safer alternative(s). Innovation needed for safer alternatives
2	Decamethylcyclopentasiloxane (D5)	541-02-6	No indication of potentially viable safer alternative(s), lower inherent exposure potential. Innovation needed for safer alternatives
3	Hydrocarbons, C3-4-rich, petroleum distillates	68512-91-4	PCDC record of use (2022 only), without additional input of current use or indication of potentially viable safer alternative(s). Revisit in a future round focused on adhesives
4	o-Xylene	95-47-6	Mixed xylenes more likely to be used as a process chemical than o-xylene
5	Pyridine	110-86-1	Questions regarding critical use(s) and potentially viable safer alternatives; Also, more information is needed about use (solvent and/or stripper and/or catalyst)
6	Ethylene glycol	107-21-1	Equivocal Hazard Data. Monitor ChemForward listing and take off Watch/Candidate list if removed from ChemForward Hazard Band F

TRB Recommendation: Watch/Candidate List

	Chemical	CAS
Chemicals Without Clear Indication of Use in Electronics Manufacturing		
7	Bis (chloromethyl) ether	542-88-1
8	Bromodichloromethane	75-27-4
9	Bromoethane (ethyl bromide)	74-96-4
10	Chloroethane	75-00-3
11	Hexachloroethane	67-72-1
12	Trichlorobenzene	120-82-1
Petroleum Distillates with Lower Exposure Potential		
13	Aromatic naphtha, type 1 (High solvent naphtha)	64742-95-6
14	C13-14 Isoparaffin; hydrotreated light petroleum distillates	64742-47-8
15	Distillates (petroleum), hydrotreated (mild) light naphthenic (9CI)	64742-53-6
16	Naphtha, petroleum, hydrotreated heavy (C9-11 alkane/cycloalkane)	64742-48-9
17	Stoddard solvent	8052-41-3
18	Hydrodesulfurized heavy naphtha	64742-82-1

- No clear indication of current use, OR
- Higher or lower priority based on inherent exposure potential, with no indication of potentially viable safer alternatives, OR
- Lower-priority petroleum distillates, based on inherent exposure potential

Legacy/Archive List

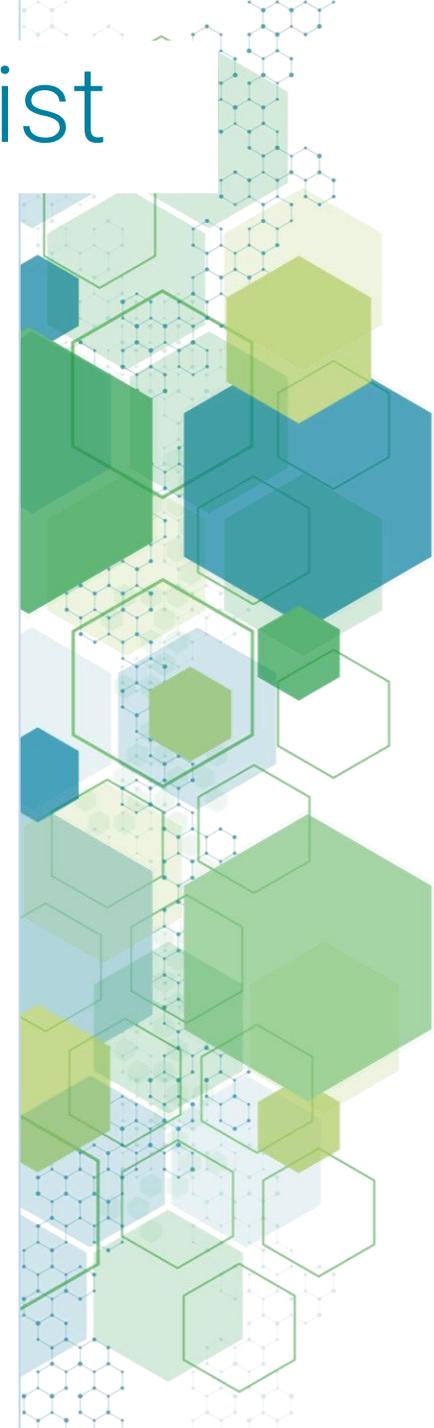
Legacy/Archive List – High-hazard chemicals that were nominated but are not currently used as process chemicals in the electronics industry, and are listed to prevent their (re)introduction into supply chains

- Used within the selected focus area(s)
- Meets CEPN High Hazard Criteria
- No indication of current use as a process chemical within the electronics industry
- Indication that chemical is being or has been phased out globally as a process chemical

TRB Recommendations: Legacy/Archive List

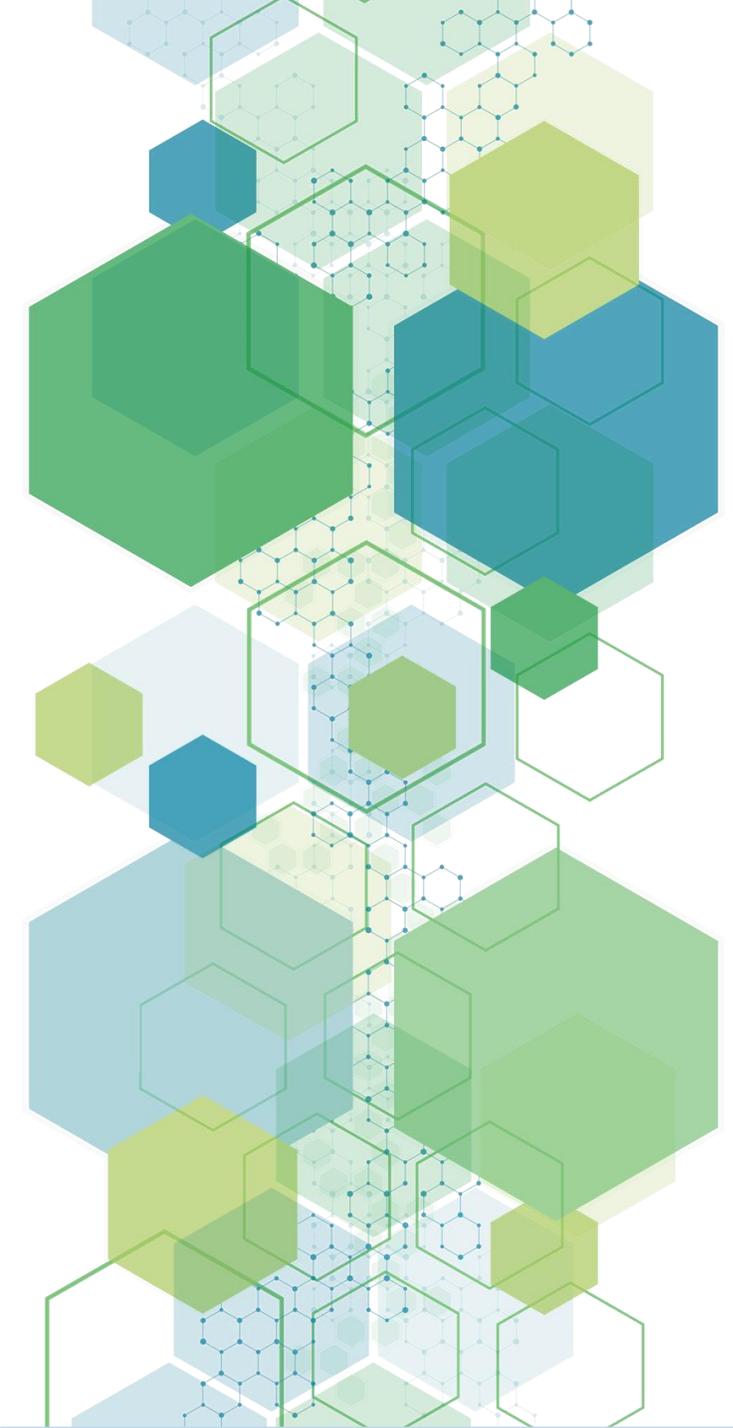
- ODC/Montreal Protocol or Stockholm Convention POP, being phased out, and
- Not on PCDC Inventories, and
- No input that chemical is currently being used

	Chemical	CAS	Explanation/Notes
1	2-Bromopropane	75-26-3	Briefly used historically by a few companies nearly 30 years ago, no indication of current or recent use; Input that “phased out”; nPB is an alternative
2	Hexachlorobutadiene; HCBD	87-68-3	Stockholm Convention POP; Not on PCDC inventories; No input that chemical is currently in use; Input that “being phased out”
3	Tetrachloromethane; Carbon Tetrachloride	56-23-5	Montreal Protocol ODC; Not on PCDC inventories; No input that chemical is currently in use; Input that “being phased out”
4	1,1,1-Trichloroethane; TCA; Methyl chloroform	71-55-6	Montreal Protocol ODC; Not on PCDC inventories; No input that chemical is currently in use; Input that “being phased out”



Stakeholder Consultation Process

- **Purpose:** To get feedback from CEPN members and interested external stakeholders on the TRB's initial recommendations
- **Duration:** Approximately 1 month
- **What will be shared:**
 - Input form
 - Slides
 - Spreadsheet with all information collected
- **Who:**
 - CEPN members
 - RBA Chemical Working Group
 - NGO Advisors
 - Any other interested stakeholder (asked in Jan. newsletter; include on webpage)



Detailed Chemical Information

TRB Recommendations: Priority Chemicals

	Chemical	CAS
1	1,1-Dichloroethane	75-34-3
2	1,1-Dichloroethylene	75-35-4
3	1,2-Dichloropropane	78-87-5
4	1-Ethylpyrrolidin-2-one; NEP	2687-91-4
5	Hydrotreated light straight run (petroleum)	64742-49-0
6	Ligroine (petroleum naphtha)	8032-32-4
7	2-(2-Methoxyethoxy)ethanol; DEGME	111-77-3
8	2-Methoxyethyl acetate; Ethylene glycol monomethyl ether acetate	110-49-6
9	N,N-Dimethylacetamide; DMAC	127-19-5
10	1,1,2-Trichloroethane	79-00-5

- Higher priority based on greater inherent exposure potential, **and**
- Indication of current use from PCDC inventories and/or Input Forms, or evidence of historical use, **and**
- Some indication of potentially viable safer alternatives

1,1-Dichloroethane (75-34-3)

- Nomination Source: MRSL (5 listings)
 - 3 specific listings, 2 listings as a chlorinated solvent
- Previous Round(s) Evaluation Outcome:
 - Evaluated in 1st Round, met hazard criteria, no indication of current use. May have been *historically used* in the electronics industry; not to be re-introduced.
- Technical/Sector Use:
 - Chemical manufacturing, fumigant, cleaning, degreasing, solvent. Chemical intermediate and as a solvent for rubbers, fats, oils, waxes and resins
- From Input Forms: Aware of use as solvent in supply chain?
 - 1 Yes / 5 No
- From Input Forms: Process chemical as defined by CEPN?
 - *Used historically* as a degreaser in the electronics industry, already on our MRSL
 - The chemical is *being phased out* in the electronics industry

- **Higher** inherent exposure potential
- Safer Alternatives Input and Information:
 - 6 solvents with solubility similarity and B or C hazard band from ChemFORWARD's Alternatives Finder (beta)

Qualifying hazard data:

- CA Prop 65 carcinogen
- GreenScreen LT-1
- ChemFORWARD Hazard Band F

TRB Recommendation (Meeting #4): Priority Chemical List

- **Rationale:** Historical use, some indication of potentially viable safer alternative(s), higher inherent exposure potential

1,1-Dichloroethylene (75-35-4)

- Nomination Source: MRSL (8 listings)
 - 5 specific listings, 3 listings as a chlorinated solvent
- Previous Round(s) Evaluation Outcome:
 - Evaluated in 1st and 2nd Rounds, met hazard criteria, no indication of current use as solvent in the electronics industry, nor potential alternatives.
- Technical/Sector Use:
 - Solvent. food packaging and wraps due to its barrier properties against water vapor and gases. Solvents for cleaning, degreasing, and extraction.
- From Input Forms: Aware of use as solvent in supply chain?
 - 1 Yes / 5 No
- From Input Forms: Process chemical as defined by CEPN?
 - **Used historically** as a degreaser in the electronics industry, already on our MRSL
 - The chemical is **being phased out** in the electronics industry

- **Higher** inherent exposure potential
- Safer Alternatives Input and Information:
 - No input or other information to date

Qualifying hazard data:

- CA Prop 65 carcinogen
- GreenScreen LT-1
- ChemFORWARD Hazard Band F

TRB Recommendation (Meeting #4): Priority Chemical List

- **Rationale:** Historical use, higher inherent exposure potential, being phased out so can infer that safer alternatives exist

1,2-Dichloropropane (78-87-5)

- Nomination Source: MRSL (5 listings)
 - 1 specific listing, 4 listings as a chlorinated solvent
- Previous Round(s) Evaluation Outcome:
 - N/A
- Technical/Sector Use:
 - Soil fumigant, chemical manufacturing, industrial solvent. *Previously used* as a solvent, degreaser, and insecticide, but some of these uses have been discontinued
- From Input Forms: Aware of use as solvent in supply chain?
 - 1 Yes / 5 No
- From Input Forms: Process chemical as defined by CEPN?
 - The chemical is *being phased out* in the electronics industry

- **Higher** inherent exposure potential
- Safer Alternatives Input and Information:
 - 5 solvents with solubility similarity and B or C hazard band from ChemFORWARD's Alternatives Finder (beta)

Qualifying hazard data:

- GreenScreen LT-1
- ChemFORWARD Hazard Band F
- CA Prop 65 carcinogen
- GHS Cat 1 carcinogen

TRB Recommendation (Meeting #4): Priority Chemical List

- **Rationale:** Historical use, some indication of potentially viable safer alternative(s), higher inherent exposure potential

1-Ethylpyrrolidin-2-one; NEP (2687-91-4)

- Nomination Source: 2024 PCDC
- Technical/Sector Use:
 - Used as a solvent, catalyst, and cationic surfactant. Used in the semiconductor and electronic component manufacturing process, effective in dissolving various materials used in electronic components.
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (5 comments)
 - Medium volumes (1 comment); Low volumes (1 comment)
 - Used for cleaning/stripping

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Aware of viable safer alts (TCO documented substitution with ASL)
 - Potential alternatives, depending on application: dimethyl sulfoxide; γ -valerolactone
 - Aware of viable safer alts CAS #3470-98-2 (1-Butylpyrrolidin-2-one)
 - Not aware of viable safer alts (1 comment)
 - Cited as a greener alternative to NMP in other industries, however simply a play on the NMP tail length

Qualifying hazard data

- Green Screen LT-1
- ChemFORWARD Hazard Band F
- GHS Cat 1 reproductive toxin

TRB Recommendation (Meeting #2): Priority Chemical List

- **Rationale:** PCDC and Input Form(s) indicate current use, some indication of potentially viable safer alternative(s), higher inherent exposure potential

Hydrotreated light straight run (petroleum) (64742-49-0)

- Nomination Source: 2022, 2024 PCDC
- Technical/Sector Use:
 - Solvent. Used as a solvent degreaser in industrial settings for cleaning metal, plastic, and glass surfaces
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (3 comments)
 - High volumes (1 comment)
 - No knowledge as a "process chemical" (1 comment)
 - For applications that don't require a very high cleaning level and something "cheap" is desired (petroleum products in general)

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Aware of viable safer alts (TCO documented substitution with ASL)
 - Safer alternatives may be possible - look for highly purified hydrocarbons without inherent toxicity, depending on application
 - Not aware of viable safer alts (1 comment)

Qualifying hazard data

- Green Screen LT-1
- ChemFORWARD Hazard Band F
- GHS Cat 1 mutagen
- GHS Cat 1 carcinogen

TRB Recommendation (Meeting #3) Priority Chemical List

- **Rationale:** PCDC and Input Form(s) indicate current use, some indication of potentially viable safer alternative(s), higher inherent exposure potential

Ligroine; Petroleum naphtha (8032-32-4)

- Nomination Source: 2022 PCDC
- Technical/Sector Use:
 - Paint solvent, cleaner. Used as a cleaning agent and degreaser in various applications
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (2 comments)
 - High volumes (1 comment)
 - No knowledge as a "process chemical" (1 comment)
 - For applications that don't require a very high cleaning level and something "cheap" is desired (petroleum products in general)

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Safer alternatives may be possible - look for highly purified hydrocarbons without inherent toxicity, depending on application
 - Not aware of viable safer alts (1 comment)

Qualifying hazard data

- Green Screen LT-1, recently updated to BM-1
- ChemFORWARD Hazard Band F
- GHS Cat 1 mutagen
- GHS Cat 1 carcinogen

TRB Recommendation (Meeting #3) Priority Chemical List

- **Rationale:** PCDC and Input Form(s) indicate current use, some indication of potentially viable safer alternative(s), higher inherent exposure potential

2-(2-Methoxyethoxy)ethanol; DEGME (111-77-3)

- Nomination Source: MRSL (3 MRSLs), 2024 PCDC
- Technical/Sector Use:
 - Solvent, cleaner. Commonly used in paints, coatings, and cleaning products.
 - Used for Cleaning; sometimes seen as part of chemical listing in the composition section of various SDS files for electronic cleaners.
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (4 comments)
 - Low volumes (1 comment)
 - No knowledge as a "process chemical" (1 comment)

Qualifying hazard data

- Green Screen LT-1
- ChemFORWARD Hazard Band F
- GHS Cat 1 reproductive toxin

Other Information

- REACH Annex XVII (REACH Restrictions List)
- FDA approval only as an indirect food additive

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Aware of viable safer alts (TCO documented substitution with ASL)
 - Potential alternatives, depending on application: dipropylene glycol monomethyl ether; isopropoxyethanol; ethylene glycol mono-n-butyl ether; 1-ethoxy-2-propanol
 - 25 solvents with solubility similarity and B or C hazard band from ChemFORWARD's Alternatives Finder (beta)
 - Not aware of viable safer alts (1 comment)
 - Should be application specific

TRB Recommendation (Meeting #2): Priority Chemical List

- **Rationale:** PCDC and Input Form(s) indicate current use, some indication of potentially viable safer alternative(s), higher inherent exposure potential

2-Methoxyethyl acetate; Ethylene glycol monomethyl ether acetate (110-49-6)

- Nomination Source: MRSL (4 MRSLs)
- Technical/Sector Use:
 - Solvent, adhesive/sealer. Versatile solvent for resins, oils, greases, inks, and various other materials; it's used in the manufacture of semiconductors. Used for stripping and coatings removal
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (1 comment) - observed in use for stripping and coatings removal

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Should be application specific
 - Industry shift from ethylene to propylene-based glycolate, starting decades ago, because of reproductive hazard concerns (TRB mtg #3 discussion)

Qualifying hazard data

- Green Screen LT-1
- ChemFORWARD Hazard Band F
- CA Prop 65 developmental, male
- GHS Cat 1 reproductive toxin

TRB Recommendation (Meeting #3): Priority Chemical List

- **Rationale:** Input Form indicates current use, TRB mtg #3: potential current use and historical use, shift to safer alternative(s)

N,N-Dimethylacetamide; DMAC (127-19-5)

- Nomination Source: MRSL (1 MRSL), 2022 PCDC
- Technical/Sector Use:
 - Industrial solvent with high dissolving power for polymers and resins, useful in fiber production, coatings, and adhesives
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (2 comments)
 - Medium volumes (1 comment)
 - No knowledge as a "process chemical" (2 comments)

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Potential alternatives, depending on application: dimethyl sulfoxide; γ -valerolactone
 - Possible safer alternatives: cyrene (53716-82-8) and 1-butyl-2-pyrrolidinone (3470-98-2)
 - Unaware of the alternatives but would recommend connecting with pharma companies/ ACS GCI Pharma Roundtable

Qualifying hazard data

- Green Screen LT-1
- ChemFORWARD Hazard Band F
- CA Prop 65 carcinogen
- GHS Cat 1 reproductive toxin

TRB Recommendation (Meeting #3): Priority Chemical List

- **Rationale:** PCDC and Input Form(s) indicate current use, some indication of potentially viable safer alternative(s), higher inherent exposure potential

1,1,2-Trichloroethane (79-00-5)

- Nomination Source: MRSL (8 listings)
 - 5 specific listings, 3 listings as a chlorinated solvent
- Previous Round(s) Evaluation Outcome:
 - Evaluated in 1st and 2nd Rounds, met hazard criteria with no indication of current use in electronics industry. Anecdotal information indicates the chemical had prior **historical uses** within the electronics industry as a solvent.
- Technical/Sector Use:
 - Solvent. Chemical intermediate and solvent for rubbers, fats, oils, waxes and resins.
- From Input Forms: Aware of use as solvent in supply chain?
 - 1 Yes / 5 No
- From Input Forms: Process chemical as defined by CEPN?
 - **Used historically** as a degreaser in the electronics industry, already on our MRSL
 - The chemical is **being phased out** in the electronics industry

Qualifying hazard data:

- CA Prop 65 carcinogen
- GreenScreen LT-1
- ChemFORWARD Hazard Band F

- **Higher** inherent exposure potential
- Safer Alternatives Input and Information:
 - 3 solvents with solubility similarity and B or C hazard band from ChemFORWARD's Alternatives Finder (beta)

TRB Recommendation (Meeting #4): Priority Chemical List

- **Rationale:** Historical use, some indication of potentially viable safer alternative(s), higher inherent exposure potential

TRB Recommendations: Watch/Candidate List

- No clear indication of current use, OR
- Higher or lower priority based on inherent exposure potential, with no indication of potentially viable safer alternatives, OR
- Lower-priority petroleum distillates, based on inherent exposure potential

	Chemical	CAS	Explanation/Notes
1	2-Butanone oxime; Methyl ethyl ketoxime	96-29-7	No indication of potentially viable safer alternative(s). Innovation needed for safer alternatives
2	Decamethylcyclopentasiloxane (D5)	541-02-6	No indication of potentially viable safer alternative(s), lower inherent exposure potential. Innovation needed for safer alternatives
3	Hydrocarbons, C3-4-rich, petroleum distillates	68512-91-4	PCDC record of use (2022 only), without additional input of current use or indication of potentially viable safer alternative(s). Revisit in a future round focused on adhesives
4	o-Xylene	95-47-6	Mixed xylenes more likely to be used as a process chemical than o-xylene
5	Pyridine	110-86-1	Questions regarding critical use(s) and potentially viable safer alternatives; Also, more information is needed about use (solvent and/or stripper and/or catalyst)
6	Ethylene glycol	107-21-1	Equivocal Hazard Data. Monitor ChemForward listing and take off Watch/Candidate list if removed from ChemForward Hazard Band F

TRB Recommendation: Watch/Candidate List

	Chemical	CAS
Chemicals Without Clear Indication of Use in Electronics Manufacturing		
7	Bis (chloromethyl) ether	542-88-1
8	Bromodichloromethane	75-27-4
9	Bromoethane (ethyl bromide)	74-96-4
10	Chloroethane	75-00-3
11	Hexachloroethane	67-72-1
12	Trichlorobenzene	120-82-1
Petroleum Distillates with Lower Exposure Potential		
13	Aromatic naphtha, type 1 (High solvent naphtha)	64742-95-6
14	C13-14 Isoparaffin; hydrotreated light petroleum distillates	64742-47-8
15	Distillates (petroleum), hydrotreated (mild) light naphthenic (9CI)	64742-53-6
16	Naphtha, petroleum, hydrotreated heavy (C9-11 alkane/cycloalkane)	64742-48-9
17	Stoddard solvent	8052-41-3
18	Hydrodesulfurized heavy naphtha	64742-82-1

- No clear indication of current use, OR
- Higher or lower priority based on inherent exposure potential, with no indication of potentially viable safer alternatives, OR
- Lower-priority petroleum distillates, based on inherent exposure potential

2-Butanone oxime; Methyl ethyl ketoxime (96-29-7)

- Nomination Source: 2024 PCDC
- Technical/Sector Use:
 - Reagent and solvent in chemical synthesis. Used as a solvent for lacquers, adhesives, cleaning materials to be electroplated, degreasing, rubber and rubber cement, printing inks, and paints, wood stains and varnishes, paint removers, in cleaning solutions, as a catalyst, and as a carrier.
 - See it sometimes in paint SDS files as part of the formula.
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (3 comments)
 - No knowledge as a "process chemical" (1 comment)

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Not aware of viable safer alts (3 comments)

Qualifying hazard data

- Green Screen LT-1
- ChemFORWARD Hazard Band F
- GHS Cat 1 acute, skin sensitizer, carcinogen, reproductive, STOT

TRB Recommendation (Meeting #4): Watch/Candidate List

- **Rationale:** PCDC and Input Form(s) indicate current use but no indication of potentially viable safer alternative(s)
- **Note:** Innovation needed for safer alternatives

Decamethylcyclopentasiloxane (D5) (541-02-6)

- Nomination Source: 2022 PCDC
- Technical/Sector Use:
 - Carrier, chemical manufacturing, dry cleaning solvent. Can be used as a solvent in various industrial processes
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (3 comments)
 - Low volumes (1 comment)
 - No knowledge as a "process chemical" (2 comments)
 - Not necessarily used as a solvent. Sometimes used as defoamant

- **Lower** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Not aware of viable safer alternatives (2 comments)

Qualifying hazard data

- Green Screen BM-1
- ChemFORWARD Hazard Band F

TRB Recommendation (Meeting #4): Watch/Candidate List

- **Rationale:** PCDC and Input Form(s) indicate current use but no indication of potentially viable safer alternative(s) and lower inherent exposure potential
- **Note:** Innovation needed for safer alternatives

Hydrocarbons, C3-4-rich, petroleum distillates (68512-91-4)

- Nomination Source: 2022 PCDC
- Technical/Sector Use:
 - Corrosion inhibitors and anti-scaling agent. Effective in removing heavy oil, grease, tar, and waxes due to its ability to penetrate and clean small spaces, can serve as a solvent in some semi-aqueous solutions
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (1 comment)
 - No knowledge as a "process chemical" (1 comment)
 - For applications that don't require a very high cleaning level and something "cheap" is desired (petroleum products in general)
 - Some question about its use as a propellant or as an adhesive component as a solvent, rather than as a solvent (TRB mtg #3).

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information from Input Forms:
 - Not aware of viable safer alternatives (1 comment)

Qualifying hazard data

- Green Screen LT-1
- ChemFORWARD Hazard Band F
- GHS Cat 1 mutagen
- GHS Cat 1 carcinogen

TRB Recommendation (Meeting #3): Watch/Candidate list.

- **Rationale:** PCDC record of use (2022 only), without additional input of current use or indication of potentially viable safer alternative(s)
- **Note:** Revisit in a future round focused on adhesives

o-Xylene (95-47-6)

- Nomination Source: MRSL (3 MRSLs)
- Technical/Sector Use:
 - Solvent. Used as a cleaning agent for tools in the painting process. Serves as a solvent in various industrial applications, such as in the production of paints, coatings, and cleaning solutions.
 - TRB question of usage of o-xylene vs mixed xylenes
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (3 comments)
 - Low volumes (2 comments)

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Substitution is not easily achievable
 - No knowledge of viable safer alternatives (1 comment)
 - Yes - Naphthenic solvents cited as possible alternative, possibly another solvent (VertecBio™ ELSOL® XR)

Details from Input Forms:

- "Can we discuss in more detail the rationale for o-xylene being included when mixed xylenes were previously? Are mixed xylenes fully encompassing?"
- "No knowledge as a "process chemical" separated from the xylene mixture typically encountered. But it's always hard to tell if someone uses this as a "loop hole" to get around not using the Xylene mixture"

Qualifying hazard data

- Green Screen BM-1

TRB Recommendation (Meeting #4): Watch/Candidate List

- **Rationale:** Mixed xylenes (already 2nd Round Priority Chemical) more likely to be used as a process chemical than o-xylene

Pyridine (110-86-1)

- Nomination Source: 2024 PCDC
- Technical/Sector Use:
 - Solvent for paint and rubber, intermediate for chemical manufacturing, flavoring agent. A good solvent for both organic and inorganic compounds. Used for Debonding / Stripping; Seen as part of formulation on SDS files for formulated products.
- Usage Information from Input Forms:
 - Yes, used as a "process chemical" (4 comments)
 - Critical solvent use (1 comment)
 - Low volumes (1 comment)
 - No knowledge as a "process chemical" (1 comment)
 - Typically used in low percentages within products (TRB mtg #3)

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Aware of viable safer alts (TCO documented substitution with ASL)
 - Aware of viable safer alts – triethylamine
 - Safer alternatives: γ -valerolactone (108-29-2) & Cyrene (53716-82-8)
 - Not aware of viable safer alternatives (1 comment)
 - Should be application specific

TRB Notes:

- May be important chemistry for certain aspects of semiconductor manufacturing, although maybe not as a solvent; used as catalyst and surface treatment in semiconductor manufacturing; likely used in very tightly controlled chambers and typically present at very small quantities
- Also used in chemical manufacturing, and seen at times in stripper products at less than 10% in the semiconductor side
- Might have critical use, substitutions would be difficult in this case especially for legacy products

Qualifying hazard data

- Green Screen LT-1
- ChemFORWARD Hazard Band F
- CA Prop 65 carcinogen

TRB Recommendation (Meeting #4): Watch/Candidate List

- **Rationale:** Although PCDC and Input Form(s) indicate current use, more information is needed about use (solvent and/or stripper and/or catalyst) as well as availability of safer alternatives)

Ethylene glycol (107-21-1)

- Nomination Source: 2022 PCDC
- Technical/Sector Use:
 - Antifreeze, de-icing, hydraulic fluid, printing inks, solvent. Cleaning agent for tools in the painting process. Electrolytic condensers, a solvent in the paint, plastics, and ink industries, found in various household and industrial cleaning products
- Usage Information from Input Forms:
 - Yes, used as "process chemical" (6 comments)
 - Critical solvent use (1 comment) / presumed not critical (1 comment)
 - High volumes (2 comments) / Low volumes (1 comment)
 - No knowledge as a "process chemical" (1 comment)

- **Higher** priority (based on inherent exposure potential)
- Safer Alternatives Input and Information:
 - Substitution is not easily achievable / Should be application specific
 - Not aware of viable safer alternatives (2 comments)
 - Aware of viable safer alts (TCO documented substitution with ASL)
 - Potential alternatives, depending on application: 1,2-propanediol; 1,3-propanediol; 1,2-butanediol; 1,3-butanediol; 1,4-butanediol
 - 2 solvents with solubility similarity and B or C hazard band from ChemFORWARD's Alternatives Finder (beta)

Qualifying hazard data

- ChemFORWARD Hazard Band F
- Green Screen changed from LT-1 to BM-2
- CA Prop 65 developmental (ingested)
- More details next slide

TRB Recommendation (Meeting #3): Watch/Candidate list

- **Rationale:** PCDC and Input Form(s) indicate current use, some indication of potentially viable safer alternative(s), higher inherent exposure potential, however **equivocal hazard data**
- **Note:** Monitor ChemForward listing and take off Watch/Candidate list if removed from ChemForward hazard band F

TRB Recommendations: Legacy/Archive List

- ODC/Montreal Protocol or Stockholm Convention POP, being phased out, and
- Not on PCDC Inventories, and
- No input that chemical is currently being used

	Chemical	CAS	Explanation/Notes
1	2-Bromopropane	75-26-3	Briefly used historically by a few companies nearly 30 years ago, no indication of current or recent use; Input that “phased out”; nPB is an alternative
2	Hexachlorobutadiene; HCBD	87-68-3	Stockholm Convention POP; Not on PCDC inventories; No input that chemical is currently in use; Input that “being phased out”
3	Tetrachloromethane; Carbon Tetrachloride	56-23-5	Montreal Protocol ODC; Not on PCDC inventories; No input that chemical is currently in use; Input that “being phased out”
4	1,1,1-Trichloroethane; TCA; Methyl chloroform	71-55-6	Montreal Protocol ODC; Not on PCDC inventories; No input that chemical is currently in use; Input that “being phased out”

