

EPS Industry Alliance (Walter Reiter)

Please see attached comments and annex to preliminary statewide collection list.

Comments on Washington Preliminary Statewide Collection Lists

Expanded Polystyrene Transport and Protective Packaging

The Expanded Polystyrene Industry Alliance (EPS-IA) appreciates the opportunity to comment on the Washington Department of Ecology's preliminary statewide collection lists and supporting evaluation of covered materials under the Recycling Reform Act.

EPS-IA respectfully requests two related revisions concerning expanded polystyrene (EPS) transport and protective packaging:

1. **Create a separate material category for expanded polystyrene (EPS) transport and protective packaging in the Materials Evaluated list**, distinct from food-service EPS, loose-fill packaging, and other EPS applications; and
2. **Include EPS transport and protective packaging on the Alternative Collection List**, recognizing that the material is mechanically recyclable through source-separated collection, consolidation, densification, and delivery to established recycling end markets.

These changes would more accurately reflect the physical characteristics, collection requirements, processing methods, contamination profile, and established recycling pathway of clean molded EPS transport and protective packaging.

They would also allow Ecology to apply its evaluation criteria to the material itself rather than to a heterogeneous category combining products with materially different recycling characteristics.

I. EPS Transport and Protective Packaging Should Be Evaluated Separately

The current Materials Evaluated list places transport and protective EPS within the broad category “#6 EPS Non-food Packaging,” which includes products such as loose-fill packing peanuts, which are frequently not EPS.

That grouping conflates materially different products.

Clean molded EPS transport and protective packaging commonly includes:

- protective packaging for appliances, electronics, furniture, medical equipment, and other durable products;
- molded end caps, corner protection, blocks, and cushioning forms;
- clean EPS sheets and protective components;
- EPS cold-ship containers for food, aquaculture, seafood, agriculture, biological, and pharmaceutical products; and
- Other qualifying EPS transport containers.

These materials differ from food-service EPS, commonly extruded polystyrene, because they generally do not carry food contamination. They differ from loose-fill packaging because molded blocks and forms can be readily identified, accumulated, consolidated, and densified.

Combining these products into a single “EPS Non-food Packaging” category risks allowing the characteristics of one application to determine the evaluation of another.

EPS-IA therefore recommends creation of a separate category:

#6 EPS Transport and Protective Packaging

A corresponding description could provide:

Clean molded expanded polystyrene packaging used to protect products during transportation, distribution, or storage, including protective packaging for appliances, electronics, furniture, temperature sensitive food, agricultural, and biological materials, medical equipment and similar products; molded EPS blocks, end caps, corner protection, sheets and qualifying transport containers. Excludes direct contact food-service packaging and loose-fill packaging.

Washington law already recognizes that EPS products are not a homogeneous category. Existing state restrictions distinguish particular EPS food-service products, loose-fill packaging, and recreational coolers from other EPS packaging applications. The statewide collection-list evaluation should similarly distinguish products where their recycling characteristics and management pathways differ.

II. EPS Transport Packaging Is Particularly Appropriate for Alternative Collection

Ecology’s evaluation appropriately identifies difficulties associated with putting loose EPS into conventional commingled curbside recycling systems. Low bulk density, fragmentation, and incompatibility with many conventional material recovery facilities are legitimate collection and handling considerations.

Those characteristics, however, identify the **appropriate collection method**. They do not establish that the material is incapable of recycling.

EPS-IA is **not requesting that EPS transport and protective packaging be added to conventional commingled curbside recycling absent collection, sorting, and handling infrastructure capable of managing it appropriately.**

Indeed, introducing EPS into unsuitable commingled systems could increase breakage, contamination, and material escape.

Instead, EPS transport packaging is well suited to a source-separated recycling pathway:

source-separated collection → consolidation → densification → transportation → mechanical recycling → responsible end market.

Ecology's Alternative Collection List provides a mechanism specifically suited to materials for which specialized collection is appropriate because of operational, infrastructure, or technical considerations.

Existing Washington programs already demonstrate that model.

King County directs clean white EPS blocks away from curbside recycling and instead provides dedicated collection at the Bow Lake and Shoreline facilities in partnership with Styro Recycle.

Seattle provides a separately scheduled special-item collection option for EPS blocks and forms rather than instructing residents to place EPS in mixed curbside recyclables.

Most significantly, in May 2026 the City of Tacoma restored EPS recycling after installing a new municipal densifier. Tacoma accepts clean rigid EPS packaging blocks, sheets, and qualifying coolers, processes the material through the densifier, and transports the resulting dense blocks to a recycling facility in Kent for preparation for manufacture into new products.

These programs demonstrate that the collection challenges Ecology identifies are manageable through alternative collection.

The appropriate conclusion is therefore not that EPS transport packaging should be excluded from recycling. The appropriate conclusion is that it should be placed on the **Alternative Collection List**.

III. Existing Washington Recycling Activity Demonstrates More Than Technical Recyclability

Washington possesses actual EPS recycling infrastructure, not merely evidence that EPS can theoretically be recycled.

In 2022, Resource Recycling Systems (RRS), an independent recycling consulting firm, identified **five Washington entities associated with EPS recycling** in research conducted for EPS-IA:

- Albertsons/Safeway;
- City of Tacoma;
- CityMix;
- Styro Recycle, LLC; and
- Total Reclaim.

The list should not be viewed as a comprehensive census, and facility roles and current operations should be evaluated individually. It nevertheless demonstrates that EPS recovery activity in Washington extends beyond a single identified entity.

EPS-IA subsequently sought facility-specific recycling-volume information through its voluntary recycling survey. Only one of these Washington entities, Styro Recycle, provided EPS-IA with 2024 processing-volume information.

Styro Recycle reported processing approximately **510,000 pounds—more than 255 tons—of post-consumer EPS in 2024**, in addition to substantial pre-consumer EPS volume.

This is important evidence.

The reported amount demonstrates that Washington EPS recycling is not merely a technically feasible process demonstrated at pilot scale. At least one Washington operation actually processed more than a quarter-million pounds of post-consumer EPS during a single year.

That amount should be treated as a **documented minimum**, however, rather than an estimate of total Washington EPS recycling.

IV. Absence of Facility Data Is Not Evidence of Absence of Recycling

The limitations encountered in obtaining Washington facility data raise an important methodological issue for Ecology's current evaluation and future implementation of performance requirements.

Independent recyclers are separate commercial entities. Producers, producer associations, and a producer responsibility organization do not necessarily possess

contractual relationships or legal authority enabling them to compel every independent recycler, processor, broker, or downstream manufacturer to disclose proprietary information concerning:

- material throughput;
- source of material;
- processing yield;
- contamination or reject rates;
- customer relationships;
- recycled commodity sales; or
- downstream destinations.

EPS-IA was able to obtain facility-specific 2024 Washington recycling volume from one identified recycler. It was not able to obtain comparable data from the remaining entities identified by RRS.

That distinction is important:

Data not reported is not the same as recycling not occurring.

Accordingly, Ecology should avoid any methodology that treats unavailable third-party information as equivalent to zero recycling, zero recycling capacity, or absence of responsible end markets.

This issue is especially relevant to materials such as EPS transport packaging that developed specialized private-sector recycling networks outside conventional municipal curbside systems and before creation of the producer responsibility framework.

V. The Recycling Reform Act Makes Accurate Treatment of Independent Recycling Activity Important

Washington's Recycling Reform Act defines a recycling rate by reference to material delivered to responsible markets and establishes enforceable performance requirements that include recycling rates.

The statute also anticipates measurement of material at the point it leaves a material recovery facility or other processing facility.

Service providers receiving reimbursement or funding under an approved plan have specific documentation and reporting responsibilities to the producer responsibility organization.

Not every legitimate recycling transaction, however, necessarily originates within a producer responsibility organization's contractual network.

Existing private recycling relationships may involve generators, collectors, processors, brokers, manufacturers, and responsible markets operating independently from the PRO-funded collection system.

That creates an important measurement distinction:

A PRO may be accountable for a statewide performance metric without necessarily controlling every entity that possesses information needed to measure all recycling contributing to that metric.

For purposes of these collection-list comments, EPS-IA does not ask Ecology to resolve all future reporting questions. It does request that Ecology avoid embedding a problematic assumption into the statewide collection-list evaluation: that recycling activity for which comprehensive facility-specific data is unavailable should be treated as nonexistent.

The statewide collection-list process should instead recognize verified infrastructure and documented recycling activity while acknowledging reasonable limitations in third-party data availability.

VI. Ecology Should Preserve the Distinction Between Measurement, Control, and Environmental Performance

The development of enforceable producer responsibility performance targets makes three concepts particularly important.

Measurement

Whether a regulated entity can accurately quantify all material recycled through independent market participants.

Control

Whether a producer or PRO possesses the ability to direct the conduct of independent recyclers, generators, collectors, brokers, consumers, or downstream manufacturers.

Proof

Whether a producer or PRO can obtain evidence sufficient to receive regulatory credit for recycling that actually occurred.

These concepts should not be assumed to be identical.

For example, a material may in fact reach a responsible recycling market even though the producer did not select the recycler, did not finance the transaction, and does not possess contractual authority to obtain proprietary throughput information from the facility.

A regulatory measurement system that counts such recycling only when the producer can produce information controlled by an unrelated third party risks understating actual environmental performance.

That problem could be particularly acute if material-introduction data used as the denominator of a recycling rate is comprehensively available from regulated producers while recycling data used for the numerator depends in part on voluntary information from independent downstream facilities.

Ecology should avoid creating a structural downward bias in measured recycling rates simply because one side of the calculation is more readily subject to regulatory reporting than the other.

VII. Application of Ecology's Evaluation Criteria Supports Alternative Collection

A. Statewide Collection Access

Ecology's evaluation should consider suitability for alternative collection, not simply current acceptance in commingled curbside programs.

Washington already demonstrates several potential alternative collection modes for EPS:

- permanent public drop-off;
- municipal transfer-station collection;
- private recycling drop-off;
- scheduled source-separated residential pickup;
- commercial-generator pickup;
- community collection events; and
- municipal densification.

A producer-funded program could connect and expand these existing models.

B. Compatibility With Sorting and Processing Infrastructure

EPS transport packaging should not be evaluated solely according to its compatibility with conventional mixed-recyclable MRFs.

In an alternative system, the material can bypass mixed-recyclables sorting altogether.

Tacoma provides a particularly clear example: clean rigid EPS is separately delivered, densified on site, and transported as a concentrated material to a specialized processor.

The fact that source-separated collection is preferable therefore supports Alternative Collection List placement.

C. Responsible End Markets

Styro Recycle documents an existing Washington pathway in which collected EPS is processed into dense recycled-polystyrene material for sale into manufacturing applications.

CityMix also presently describes a process using recycled waste EPS as feedstock for a lightweight concrete additive, further demonstrating that recycled EPS may enter applications beyond a single manufacturing pathway.

Regional EPR systems provide additional evidence. Oregon's program planning separately identifies block white EPS, while British Columbia maintains an established depot-based collection system for firm foam cushion packaging, including packaging protecting electronics and appliances.

Ecology should evaluate the actual mechanical recycling pathway for clean EPS transport packaging rather than infer end-market limitations from food-contaminated EPS or from the performance or closure of an individual facility using a different recycling technology.

D. Anticipated Yield Loss

Clean molded transport packaging should be evaluated independently from food-service EPS.

Food contamination, liquid residue, mixed-material attachments, and some of the other factors that can increase processing losses in food-service material are substantially reduced when clean protective packaging is source separated.

EPS-IA recommends that Ecology seek processing-yield information specific to clean transport and protective EPS where available.

Where independent processors do not voluntarily disclose proprietary yield information, Ecology should distinguish absence of available data from evidence of poor yield.

E. Consumer Identification and Preparation

Rigid molded EPS transport packaging is visually distinctive.

Existing programs use straightforward preparation instructions such as:

- clean and dry;
- rigid EPS blocks or forms;
- remove tape and labels;
- remove cardboard and other attached materials; and
- keep separate from conventional curbside recycling.

British Columbia further demonstrates that consumer instructions can expressly identify firm foam packaging used to protect electronics and appliances.

F. Contamination Potential

Ecology is correct that EPS can fragment and interfere with other materials when improperly introduced into a mixed-recyclables stream.

Alternative collection addresses that concern.

Rather than using contamination potential as a reason to exclude EPS transport packaging, Ecology should recognize that keeping the material source separated protects both the EPS commodity and other recyclable materials.

G. Harmonization With Neighboring EPR Programs

Oregon and British Columbia provide particularly relevant regional precedents.

Oregon's EPR planning separately identifies **Block White Expanded Polystyrene (EPS)** and anticipates producer-supported collection infrastructure for the material.

British Columbia designates foam packaging as **depot-only**, including firm foam cushion packaging used to protect electronics and small appliances.

British Columbia therefore provides a mature example of the fundamental policy distinction EPS-IA recommends for Washington:

Not appropriate for commingled curbside collection does not mean not recyclable.

VIII. The Alternative Collection List Provides an Opportunity to Build on Existing Infrastructure

EPS has physical characteristics that make transportation before densification relatively inefficient.

That characteristic is not unique in the recycling system. Different materials require different collection and processing infrastructure.

For EPS, densification directly addresses low bulk density.

Washington already has:

- existing collection programs;
- a specialized EPS processor;
- documented post-consumer processing volume;
- municipal source-separated collection;
- a newly installed municipal densifier;
- private recycled-EPS applications; and
- neighboring EPR jurisdictions operating or developing alternative collection models.

The producer responsibility system can expand that foundation through strategically located collection points, consolidation, densification, consumer education, and connections to responsible markets.

That is a more appropriate application of EPR than requiring EPS to demonstrate compatibility with an infrastructure system designed around different materials.

IX. Requested Revisions

EPS-IA respectfully requests that Ecology:

1. **Create a separate “#6 EPS Transport and Protective Packaging” category** in the Materials Evaluated list;
2. Define the category to include clean molded EPS used to protect products during transportation, distribution, and storage while distinguishing the material from food-service EPS and loose-fill packaging;
3. **Add EPS transport and protective packaging to the Alternative Collection List;**

4. Evaluate the material independently under each applicable criterion using evidence specific to clean, source-separated transport and protective packaging;
5. Recognize community drop-off, transfer-station collection, municipal collection, commercial collection, collection events, consolidation, and densification when evaluating collection access and infrastructure;
6. Recognize documented Washington post-consumer EPS recycling volumes as evidence of actual recycling activity while treating voluntarily reported quantities as documented minimums rather than estimates of total statewide recycling;
7. Avoid interpreting the absence of voluntarily reported facility-specific data as evidence that recycling activity, processing capacity, or responsible markets do not exist;
8. Evaluate mechanical recycling end markets for clean EPS transport packaging independently from food-service EPS and from individual chemical-recycling technologies or facilities;
9. Account for the role of independent collectors, processors, recyclers, brokers, manufacturers, and responsible markets when developing future performance-measurement methodologies; and
10. Ensure that future reporting and performance methodologies do not require producers or the PRO to substantiate independent third-party activity through information they do not possess and have no practical or legal means to compel, without providing a workable mechanism for obtaining that information.

Conclusion

Ecology has correctly identified that EPS presents collection and transportation considerations different from materials commonly handled through commingled curbside recycling.

Those differences support a different **collection pathway**, not a conclusion that clean EPS transport and protective packaging is nonrecyclable.

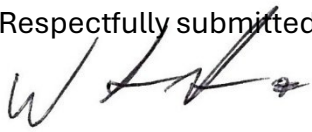
Existing Washington infrastructure demonstrates source-separated collection, municipal densification, specialized processing, substantial documented post-consumer throughput, and downstream manufacturing applications. Oregon and British Columbia further demonstrate that neighboring producer responsibility systems can recognize EPS protective packaging while managing the material separately from conventional curbside recycling.

Separating EPS transport and protective packaging in the Materials Evaluated list and placing it on the Alternative Collection List would therefore recognize both the material's established mechanical recyclability and the operational realities of collecting it responsibly.

It would also help ensure that Washington's producer responsibility framework measures actual recycling performance rather than inadvertently equating limitations in third-party data availability with absence of recycling.

The EPS Industry Alliance welcomes the opportunity to provide additional information and answer any questions regarding expanded polystyrene manufacture, use and recycling.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. A. Reiter, III', with a stylized flourish at the end.

Walter A. Reiter, III
President
EPS Industry Alliance

enc. **Annex EPS Transport and Protective Packaging:
Washington, Pacific Northwest, and British Columbia Collection, Processing,
and End-Market Infrastructure**

Annex EPS Transport and Protective Packaging:

Washington, Pacific Northwest, and British Columbia Collection, Processing, and End-Market Infrastructure

1. Purpose

This annex provides supporting information concerning existing and emerging infrastructure for the collection and recycling of expanded polystyrene transport and protective packaging in Washington and neighboring jurisdictions.

The evidence demonstrates an established recycling pathway:

source-separated collection → consolidation → densification → transportation → processing → recycled-polystyrene commodity → responsible end market.

The available evidence also demonstrates why the absence of complete processor data should not be equated with absence of recycling activity.

Many EPS recyclers developed independently from producer responsibility programs. Producers and producer associations generally cannot compel unaffiliated commercial entities to provide proprietary throughput or end-market information.

Accordingly, documented recycling volumes should be viewed as verified minimums unless the underlying data collection process is demonstrated to be comprehensive.

2. Washington State Infrastructure

2.1 RRS 2022 Washington Recycler Research

In 2022, Resource Recycling Systems (RRS) developed a national EPS recycler database for EPS-IA.

RRS identified five Washington entities associated with EPS recycling:

Entity	Washington EPS	
	Relevance Identified by RRS	Current Data Available to EPS-IA
Albertsons/Safeway	Identified in RRS Washington list	No 2024 facility-specific EPS volume reported to EPS-IA

Entity	Washington EPS Relevance Identified by RRS	Current Data Available to EPS-IA
City of Tacoma	Municipal EPS collection/processing	No facility-specific 2024 throughput reported to EPS-IA; current municipal infrastructure independently documented
CityMix	Recycled EPS end- use/application	No 2024 facility-specific volume reported to EPS-IA
Styro Recycle, LLC	Dedicated EPS collection and processing	2024 post-consumer processing volume reported
Total Reclaim	Identified in RRS Washington list	No 2024 facility-specific EPS volume reported to EPS-IA

Important limitation: The RRS list was developed as an infrastructure research resource and should not be represented as a comprehensive census of every EPS recycler or end market.

Subsequent review of the national database has identified known EPS recyclers elsewhere that were not captured in the 2022 list. This reinforces the importance of treating facility directories as useful evidence of known infrastructure rather than proof that facilities not appearing in the directory do not exist.

2.2 Styro Recycle — Kent, Washington

Styro Recycle operates a dedicated EPS recycling facility in Kent.

The facility publicly accepts clean EPS, including clean shipping coolers, Styrofoam sheets, and other qualifying rigid EPS material. Commercial quantities can also enter the recycling system through specialized collection arrangements.

EPS-IA's 2024 recycling survey provides quantitative evidence of the facility's actual post-consumer processing activity.

Styro Recycle reported approximately:

510,000 pounds of post-consumer EPS processed in 2024

or more than:

255 tons of documented post-consumer EPS.

Styro Recycle also reported substantial pre-consumer EPS processing during the same year.

This facility-specific data is important because it establishes actual commercial-scale post-consumer processing in Washington.

The approximately 510,000-pound figure should **not**, however, be interpreted as Washington's total EPS recycling volume.

It represents the recycling volume reported to EPS-IA by one Washington operation.

Data qualification

EPS-IA's survey is voluntary. Independent recycling entities are not required to participate in the survey or provide EPS-IA with facility-specific operational data.

Accordingly:

Reported volume = documented volume.

It does not necessarily equal:

Total volume recycled in Washington.

2.3 King County — Bow Lake and Shoreline

King County provides separate collection of qualifying clean white EPS blocks at the Bow Lake and Shoreline recycling and transfer stations.

The County expressly advises residents that Styrofoam cannot be placed in conventional curbside recycling and instead directs the material to dedicated collection.

The service operates in partnership with Styro Recycle.

The material is required to be clean and dry, with tape, labels, and other contamination removed.

This system is an existing example of:

public collection site → source-separated EPS → specialized processor.

Evaluation significance

King County demonstrates that the operational concerns associated with conventional curbside collection can be addressed without discarding the material.

The program separates the question:

“Should this material go in the curbside cart?”

from:

“Can this material be recycled through an appropriate system?”

2.4 City of Seattle — Special-Item Collection

Seattle Public Utilities maintains a separate special-item collection option for EPS blocks and forms.

The program accepts limited quantities of EPS blocks/forms and requires removal of tape and other packing material.

Seattle does not require EPS to be placed in the conventional mixed curbside recycling stream.

This provides an additional alternative collection model:

scheduled source-separated collection rather than permanent depot collection.

It demonstrates that Alternative Collection List implementation can employ multiple service models depending upon geography and population density.

2.5 City of Tacoma — Municipal Densification

The City of Tacoma restored EPS recycling at the Tacoma Recycle Center in May 2026 following installation of a new municipal EPS densifier.

The City currently accepts clean qualifying material including:

- rigid EPS packaging blocks;
- EPS packaging sheets; and
- qualifying EPS coolers.

Tacoma specifically excludes packing peanuts, food containers, and dirty or contaminated foam.

This acceptance policy itself illustrates the usefulness of distinguishing clean molded transport and protective packaging from other EPS products.

Collected material is processed on site through the City's densifier.

The densifier compresses the EPS into solid blocks, after which the material is transported to manufacturers for use as feedstock for new products.

Evaluation significance

Tacoma demonstrates all of the principal operational elements relevant to Ecology's evaluation:

1. consumer identification;
2. source separation;
3. contamination controls;
4. municipal collection;
5. densification;
6. reduced transportation volume;
7. transfer to specialized recycling infrastructure; and
8. preparation for new manufacturing.

Tacoma therefore provides direct Washington evidence that low bulk density is an **infrastructure consideration that can be managed through densification**, rather than an inherent barrier to recycling.

2.6 CityMix — Washington Recycled EPS Application

CityMix, headquartered in Washington, publicly describes a technology that uses recycled waste EPS as a lightweight aggregate for concrete and concrete products.

CityMix states that waste packaging and insulating EPS can be converted into coated EPS particles incorporated into cement-based products.

Its current public materials describe the product as composed predominantly of recycled waste by volume.

This provides evidence of an additional recycled-EPS application distinct from conventional extrusion of densified EPS into polystyrene feedstock.

Further facility-specific verification would be appropriate before attributing particular Washington annual tonnage to this pathway.

Evaluation significance

CityMix demonstrates that recycled EPS may enter multiple end-use applications and reinforces why responsible-market evaluation should examine actual downstream pathways rather than rely solely on a count of conventional reclaimers.

3. Data Limitations and Independent Market Participants

3.1 Five Entities Identified; One Provided EPS-IA With 2024 Volume Data

The RRS research identified five Washington entities associated with EPS recycling.

EPS-IA obtained facility-specific 2024 processing information from only one: Styro Recycle.

The correct inference is **not** that the remaining entities recycled zero EPS.

The correct inference is that EPS-IA does not possess verified 2024 facility-specific throughput data for those entities.

Those statements are materially different.

3.2 Independent Recycling Activity Predates EPR

Specialized EPS collection and recycling systems developed before Washington's current producer responsibility framework.

Existing recycling transactions may involve:

- commercial generators;
- municipal programs;
- private collectors;
- transfer facilities;
- independent recyclers;

- brokers;
- manufacturers; and
- downstream markets.

A producer may not be party to those transactions.

A PRO may likewise lack a contractual relationship with a recycler handling material generated outside the PRO-supported collection system.

3.3 Data Availability Should Not Be Confused With Producer Control

An independent recycler may possess information relevant to statewide recycling performance but have no commercial reason to provide detailed proprietary data voluntarily to an unrelated producer or industry association.

Potentially sensitive information includes:

- annual throughput;
- customers;
- source locations;
- contamination;
- yield;
- pricing;
- commodity sales;
- buyers;
- contracts; and
- downstream destinations.

Washington law recognizes the potential sensitivity of information submitted by service providers, material recovery facilities, responsible markets, and other entities by providing mechanisms for requesting confidentiality.

That recognition underscores an important point: relevant recycling information may reside with entities other than producers.

4. Performance Measurement Implications

Washington defines a recycling rate based on material delivered to responsible markets relative to material introduced.

The Recycling Reform Act also requires performance targets, including recycling rates for materials delivered to responsible markets.

For purposes of measuring recycling performance, the statute contemplates methodologies measuring material as it leaves a material recovery facility or other processing facility.

Funded service providers have documentation obligations to the PRO.

The challenge arises when legitimate recycling occurs through independent transactions outside the PRO-supported system.

Illustrative example

Assume:

- 100 tons of a covered material are introduced;
- 45 tons actually reach responsible recycling markets;
- 30 tons move through channels for which the PRO has complete documentation; and
- 15 tons are recycled through independent facilities from which comprehensive data cannot be obtained.

The environmental outcome is a **45% recycling rate**.

If the measurement system gives credit only for data directly controlled by the PRO, reported performance could appear to be **30%**.

That difference is not a recycling failure.

It is a **measurement gap**.

This example illustrates why future performance methodologies should address independently managed material rather than presuming unreported activity equals zero.

5. Three Distinct Implementation Risks

5.1 Measurement Risk

Can producers or the PRO accurately quantify recycling occurring through independent market channels?

5.2 Control Risk

Can producers or the PRO compel independent generators, recyclers, brokers, consumers, or end markets to behave in a manner necessary to satisfy the performance metric?

5.3 Proof Risk

Where recycling actually occurs, can producers or the PRO obtain documentation controlled by an independent third party sufficient to obtain regulatory credit for that recycling?

These questions should remain distinct.

An entity may be legally responsible for a performance metric without possessing control over all events or information contributing to the metric.

That distinction warrants careful treatment when Ecology develops implementing methodologies.

6. Potential Numerator/Denominator Asymmetry

Producer reporting may permit Washington to estimate the amount of covered material introduced with considerable precision.

Recycling volumes present a different information problem.

Some recycling data can be obtained from PRO-funded service providers, but other recycling activity may occur through independent commercial channels.

This creates the possibility of an asymmetric calculation:

Denominator: comprehensively reported producer introduction data.

Numerator: partially observable recycling data.

If unobserved recycling is automatically treated as zero, the calculation will systematically bias measured recycling performance downward.

This concern reinforces the importance of developing practical means for collecting downstream data directly from the entities possessing it, or alternative methods for reasonably accounting for independently recycled material.

7. Oregon Regional Precedent

Oregon's Recycling Modernization Act provides a particularly relevant regional comparison.

Oregon's EPR planning identifies:

Block White Expanded Polystyrene (EPS)

as a distinct material.

Current program planning estimates approximately 490 tons of block white EPS collection and contemplates producer-supported collection infrastructure for materials not suited to conventional curbside collection.

The significance for Washington is twofold.

First, Oregon demonstrates that protective/block EPS can be evaluated as its **own material category**.

Second, Oregon demonstrates that EPR can recognize recyclable material while assigning it to a **specialized collection pathway**.

Washington therefore need not choose between conventional curbside collection and disposal.

8. British Columbia Regional Precedent

Recycle BC operates one of the region's most mature packaging EPR systems.

Recycle BC expressly lists foam packaging as:

Recycle at Depot Only.

Accepted foam includes:

firm foam cushion packaging used to protect electronics, small appliances, and similar products.

This is directly analogous to EPS transport and protective packaging.

Recycle BC maintains the material outside conventional curbside collection but within the recycling program.

Residents take qualifying foam to designated depots where source separation protects the material from the breakage and sorting problems associated with commingled collection.

Recycle BC reports that foam packaging is recycled into products such as:

- picture frames;
- construction trim;
- moulding;
- park benches; and
- fence posts.

Evaluation significance

British Columbia provides a mature demonstration of the precise policy principle EPS-IA recommends:

A material may be inappropriate for mixed curbside collection and nevertheless remain an accepted recyclable packaging material within an EPR program.

9. Regional Infrastructure Summary

Program / Entity	Location	Material / Role	Collection or Processing Model	Significance
Styro Recycle	Kent, WA	Clean EPS including transport packaging	Drop-off, commercial collection, processing/densification	>255 tons documented post-consumer processing in 2024
King County	Bow Lake / Shoreline, WA	Clean white EPS blocks	Dedicated municipal drop-off	Existing alternative public collection

Program / Entity	Location	Material / Role	Collection or Processing Model	Significance
Seattle Public Utilities	Seattle, WA	EPS blocks/forms	Scheduled special-item collection	Alternative collection without mixed curbside
Tacoma Recycle Center	Tacoma, WA	Rigid EPS packaging	Municipal drop-off + on-site densifier	Direct demonstration of densification model
CityMix	Washington	Recycled waste EPS application	EPS used in lightweight concrete aggregate	Additional end-use pathway
RRS Washington research	Washington	Five entities identified	Infrastructure research	Demonstrates broader activity but not comprehensive census
Oregon RMA / PRO planning	Oregon	Block white EPS	Producer-supported specialized collection	Neighboring EPR classification precedent
Recycle BC	British Columbia	Firm protective foam packaging	Depot-only EPR collection	Mature regional alternative collection precedent

10. Interpretation of Documented Washington Volumes

EPS-IA recommends that Ecology use the following terminology when reviewing available data:

Appropriate

“Styro Recycle reported approximately 510,000 pounds of post-consumer EPS processed during 2024.”

EPS Industry Alliance
August 12, 2026

“More than 255 tons of Washington post-consumer EPS recycling is therefore affirmatively documented through this facility-specific survey response.”

Not supported by the available data

“Washington recycled only 510,000 pounds of EPS.”

or

“Other Washington facilities recycled no EPS.”

The survey does not establish either conclusion.

The available information establishes a **floor**, not a statewide total.

11. Implications for Ecology’s Collection-List Evaluation

The evidence in this annex supports the following findings.

Collection access exists and can be expanded.

Washington already uses multiple source-separated collection models.

Appropriate processing infrastructure exists.

Washington has dedicated EPS processing and municipal densification infrastructure.

Actual post-consumer throughput is documented.

At least approximately 510,000 pounds of post-consumer EPS was reported processed by one Washington recycler in 2024.

Available data is incomplete.

Four other Washington entities identified through RRS research did not provide EPS-IA with comparable 2024 facility-specific data.

Incomplete data does not establish absent recycling.

Independent commercial entities cannot necessarily be compelled by producers or industry associations to disclose proprietary information.

Regional EPR programs support separate classification.

Oregon separately identifies black white EPS.

Regional EPR programs support alternative collection.

British Columbia accepts firm protective foam packaging through a depot-only system.

Conventional curbside incompatibility is therefore not dispositive.

The available evidence supports management through alternative collection rather than exclusion from recycling.

12. Conclusion

Washington already possesses significant components of an EPS transport and protective packaging recycling system.

The record includes:

- five Washington entities identified through prior independent infrastructure research;
- more than 255 tons of post-consumer EPS processing affirmatively documented at one Washington facility during 2024;
- dedicated private EPS collection and processing;
- municipal drop-off collection;
- scheduled source-separated collection;
- a newly installed municipal EPS densifier;
- recycled-EPS manufacturing applications; and
- neighboring EPR jurisdictions recognizing specialized collection of EPS protective packaging.

The record also identifies an important limitation in evaluating this infrastructure: recyclers and downstream market participants may operate independently of producers and may not voluntarily provide comprehensive facility data.

Ecology should therefore distinguish carefully between:

no recycling,

no recycling capacity,

and

no data available to the producer concerning independent recycling activity.

Those conditions are not equivalent.

Recognizing that distinction now will improve Ecology's evaluation of EPS transport and protective packaging and reduce the risk that future producer responsibility performance methodologies measure availability of third-party data rather than actual environmental performance.