Michael Dunning

Please see PDF of WACA comments attached.



T. +1.206.359.8000 F. +1.206.359.9000 perkinscoie.com

October 10, 2025

SUBMITTED ONLINE VIA COMMENT PORTAL, EMAIL AND CERTIFIED MAIL

Department of Ecology Water Quality Program Eric Daiber Sand and Gravel Permit Writer PO Box 47696 Olympia, WA 98503 eric.daiber@ecy.wa.gov

Re: Washington Aggregates & Concrete Association Comments on 2026 Draft Sand & Gravel General Permit

Dear Mr. Daiber,

We represent the Washington Aggregates & Concrete Association ("WACA") and submit these comments on their behalf. WACA is a non-profit industry trade association representing a broad spectrum of businesses across Washington State, including sand, gravel, quarry rock, cement, ready-mix concrete, suppliers, and other industry-related entities. Collectively, WACA's four hundred and twenty six (426) members contribute over \$4 billion annually to the state's economy, provide more than \$1 billion in wages, and employ over 16,000 Washingtonians. WACA's members and partners will be directly and significantly impacted by the proposed changes in the draft Sand & Gravel General Permit ("SGGP") and appreciates the opportunity to provide these comments to Department of Ecology's ("Ecology") WACA respectfully submits these comments to highlight critical concerns regarding feasibility, clarity, and scientific justification of proposed permit revisions. Because of these concerns, Ecology should reconsider and revise many of the proposed conditions in the draft SGGP.

I. Introduction

The proposed permit revisions introduce sweeping changes. As described in this letter, these changes lack adequate data, impose excessive administrative burdens, and risk unintended consequences for Washington's sand, gravel and concrete operators. These changes, as currently drafted, will impose exponential economic impacts on industry, which will jeopardize a number of construction activities, including, for example, housing and transportation construction which rely upon this industry.

WACA's comments highlight the breadth of impacts of the permit revisions on WACA member operations (as the current changes do not reflect operational or economic realities); identify proposed changes that are unreasonably vague, unclear, lack scientific support, infeasible and/or are otherwise unlawful; and provide solutions for Ecology's consideration to support a more

practical, data-driven, and economically sustainable permit approach. WACA's comments are provided in two parts. The first section provides general and condition-specific comments on the Draft SGGP language revisions. Key issues include vague and inconsistent language, unjustified and unsupported permit requirements, overly prescriptive Best Management Practices (BMPs), and a lack of realistic compliance timelines. The second section provides comments regarding the Small Business Economic Impact Analysis ("SBEIA"). Key issues include the SBEIA's flawed methodology and data sets which result in significant underestimation of compliance costs on small (and large) businesses alike.

II. Background on WACA Engagement in Permit Development

WACA engaged Ecology as early as 2024 to discuss proposed SGGP revisions, and as early as May 2024 to discuss a QAPP and Metals Study, with an understanding that it would be a part of and support the draft permit. WACA and Ecology most recently met on September 30 and October 6, 2025 to discuss the draft permit revisions.

While WACA appreciates Ecology's willingness to discuss the draft permit with WACA and its members, WACA has repeatedly asked Ecology for the technical and scientific basis for several condition revisions. Ecology's responses have generally included vague references to internal agency discussions or to a single, out of state article, or some internal, unpublished study. No more clarity is found in the draft permit language or supporting materials, as further detailed below. These references fall far short of the necessary technical and legal basis to support any permit changes, let alone the extensive changes to this draft permit.

Due to the permit revisions being the most extensive overhaul of the permit since its inception, WACA requested a 30-day extension to the permit comment period. Ecology only gave two weeks. After several rescheduled phone calls (mainly by Ecology due to a lack of availability), WACA again requested additional time to comment. Ecology rejected this request on October 3, 2025. Ecology's unwillingness to provide adequate time for WACA and its members to review and assess the extensive, proposed changes greatly hinders WACA's ability to fully comment on the changes.

WACA expressly reserves all rights, claims, defenses, and remedies available under applicable law and equity. Nothing contained herein shall be construed as a waiver or relinquishment of any such rights, claims, defenses, or remedies, all of which are expressly preserved.

III. General Comments on SGGP Revisions

The sections that follow provide WACA's general concerns related to the extensive revisions to the draft permit conditions. Per Ecology's request, where applicable, each comment references the permit section and language at issue and proposes potential solutions.

¹ See Supra Section IV.D.2 and 3 for more information on the QAPP Study. At many points, WACA had to point out to Ecology serious sampling errors, and incorrect sampling points. In many cases, WACA requested resampling on the most egregious errors for data integrity purposes.

A. Many of the Draft Permit Conditions are Unlawful

Many of Ecology's proposed revisions to the Draft SGGP are unlawful and would not be upheld on appeal because they are unduly vague, lack clarity or are ambiguous; are not founded on sound scientific bases or technical analyses; and/or lack sufficient data to support the new or revised condition.

Where permit conditions are not founded on sufficient scientific or technical basis, or lack data to support the new condition, the condition is unreasonable or arbitrary and capricious, and cannot be upheld. *See Copper Development Assoc. v. Ecology*, PCHB Nos. 09-135 through 09-141 (Finding of Fact, Conclusions of Law and Order) (April 25, 2011); *Associated General Contractors v. Ecology*, PCHB No. 05-157 through 05-159 (Finding of Fact, Conclusions of Law and Order) (June 4, 2007). When permit conditions are unduly vague, lack clarity or are unduly ambiguous, the condition is invalid and unreasonable and similarly are invalid. *Id.; City & Cnty. of San Francisco, California v. EPA*, 604 U.S. 334, 355, 145 S. Ct. 704, 720, 221 L. Ed. 2d 166 (2025). Where appropriate, the sections that follow highlight legal and technical flaws that should be corrected.

B. The Draft SGGP Implements Such Extensive Changes That It No Longer Resembles a General Permit

The changes proposed to the Draft SGGP are unprecedented. They alter the entire scope of the permit and propose numerous new, burdensome requirements that are so prescriptive that the permit no longer functions as, or even resembles, a general permit. Instead, the level of detail now resembles the structure of an individual permit, thereby limiting the ability of permittees to implement site specific best practices. General permits, like this one, are designed to streamline compliance for a broad category of permittees that share similar characteristics and operations. The permit revisions make this nearly impossible.

C. The Extensive Scope of the Changes Will Require Significant Infrastructure Upgrades Which Require Realistic and Feasible Compliance Schedules

The Draft SGGP will require significant infrastructure upgrades, site improvements and capital investments. If adopted in the final SGGP (which for reasons detailed below they should not be), these upgrades cannot be accomplished without realistic implementation timelines, which the current draft simply does not provide for. The current Draft SGGP assumes compliance starting day 1.² This is unrealistic, unworkable and demonstrates Ecology's lack of understanding of WACA member operations. The regulated community cannot be expected to implement such extensive improvements before a draft permit becomes final.

² The Draft SGGP only includes a compliance schedule for Chemical Use Plans. In conversations with WACA, Ecology originally referenced a two-year implementation period for the truck washing requirements, but WACA did not find this in the Draft SGGP that was issued.

Further, implementation of such major site improvements require careful budgeting, planning, land use and environmental permitting, design, engineering and construction, all of which take time and require precise planning. These processes cannot be accelerated without abandoning feasibility, safety, or compliance with overlapping regulatory requirements. Without a realistic time period for implementation, Ecology is setting the regulated community up for failure.

WACA has attempted to educate Ecology on these points on multiple occasions.³ But, it has become clear from ongoing conversations⁴ that Ecology does not grasp the magnitude and extent of facility changes that it seeks to mandate under the Draft SGGP.⁵ For example, as recently as September 30, 2025, Ecology expressed "surprise" that the proposed changes associated with truck washing in S3.F.2. and S3.G.3 would be so extensive and would need a clear, phased compliance schedule to implement because, in Ecology's words, it's "just soap."

The "just soap" comment is an example of Ecology's lack of understanding the magnitude of the proposed permit changes, their impacts on operators and the need (if implemented) for a clear, and phased compliance schedule. We use draft Special Conditions S3.F.2 and S3.G.3, which are completely new additions to the Draft SGGP, as an example of Ecology's uninformed position on draft permit changes, their impact on the industry and the challenges of implementation.

These conditions prohibit all "soap impacted" discharges to surface and groundwater. Soap-impacted waters is defined in Appendix B as: "water affected by any natural or artificial soaps, synthetic detergents, emulsifiers, surfactants, or other foaming agents. Such soap-impacted waters are classified as process waters." The conditions read as follows:

- S3.F.2 "All soap-impacted waters are prohibited from discharge to surface waters of the state"
- S3.G.3 "All soap-impacted waters are prohibited from discharge to ground waters of the state."

To comply with this "just soap" requirement, operators must either: (a) stop using soap, which effectively discontinues fleet maintenance; (b) design a close-loop system; or (c) obtain a authorization to discharge industrial wastewater to sanitary sewer (requiring yet another discharge permit).

None of those options are feasible. First, discontinuing fleet maintenance is not feasible because doing so would cause adverse environmental impacts such as increased track-out from dirty tires, subsequent run-off to storm drains, as well as damage to expensive assets, and accelerated wear and tear on equipment.

³ See WACA Letters to Ecology dated June 9, 2025, August 27, 2025 and September 26, 2025.

⁴ Virtual Meetings between WACA and Ecology on May 6, 2025, June 12, 2025 and September 30, 2025.

⁵ Virtual Meetings between WACA and Ecology on May 6, 2025, June 12, 2025 and September 30, 2025. *See also* WACA Letter to Ecology dated June 9, 2025.

Second, designing a closed loop system is not feasible because there is not sufficient space on most sites to accommodate this. Further, the cost of implementing such a system would surpass \$100,000 for one installation. This is because process water, including truck wash water, is currently required to be routed over impervious surface to the onsite treatment system prior to discharge. The first step in complying with this new "just soap" requirement would be to separate truck wash water from other process waters which will require engineering, design, and some combination of paving, grading, curbing, trenching, or pumping depending on the site. In many jurisdictions, the excavation and fill volumes needed for grading and new paving would trigger separate permitting requirements, which take time to process and obtain approval for (not to mention additional costs and resources). Industry would then need to complete the engineering, design and construction needed for the closed-loop system. To prevent comingling (as required by S8 of the Draft SGGP) and to maintain detention capacity, a roof or cover would be needed to keep precipitation out of the system. A roof or cover would trigger a building permit, with the threshold for some jurisdictions⁶ being as small as a roof area exceeding 120 square feet (likely exceeded under this scenario).

Third, seeking sanitary discharge authorization is also not feasible. Many public sanitary systems, particularly in Western Washington, lack the capacity to treat the volume of water they already receive, so they actively discourage it. They also generally don't accept industrial wastewater. But, even if authorization was obtainable, time would be needed to prepare the application materials, apply for, and receive approval to discharge. Additionally, all of the steps described above to separate truck wash water from other process waters would still need to be implemented. In any of these scenarios, facilities would also need to engineer, design, and install infrastructure to transport truck wash water to the sanitary discharge point.

This example is but one of many instances (also highlighted in the sections that follow) where the practical realities of implementation have been overlooked, not understood, or ignored by Ecology. Without meaningful engagement and a more thorough understanding of facility operations, the Draft SGGP currently risks imposing infeasible, unworkable mandates that could disrupt essential services, increase environmental risk, and strain already limited resources. WACA is increasingly concerned by Ecology's lack of rigor in identifying and accounting for the significant costs and operational impacts of these requirements which reflects a broader failure to consider the regulated community's perspective.

For all these reasons, WACA requests that Ecology re-engage with WACA and other stakeholders at it reviews comments to revise the draft permit in a way that is consistent with the practical realities of these changes, and include a phased implementation timeline.

⁶ RCW 19.27.095(2). Application requirements are defined by local ordinance but state law anticipates projects costing more than \$5,000 dollars to submit an application.

⁷ See https://pugetsoundkeeper.org/current-priorities/wastewater-pollution/ "Many municipal wastewater systems are challenged by population growth and infrastructure limitations.....Many sewage treatment plants also receive industrial wastewater. Since municipal sewage treatment facilities are not equipped to deal with the heavy contamination that can result from industrial operations, these treatment facilities must set up a pretreatment agreement requiring the industrial operation to eliminate certain contaminants at the source, prior to discharging their wastewater to the sewer. If this process fails at any point, it can result in serious pollution problems."

D. New Conditions are Vague, Confusing and Create Unnecessary Ambiguity

WACA is concerned that the extensive language changes in the Draft SGGP create unnecessary ambiguity and confusion. In many instances, it is unclear what Ecology's intention is—whether to actually alter the meaning and application of a condition, or simply clarify those conditions with updated language. In either instance, Ecology should make its intention clear. Examples illustrating this concern are provided below.

1. Special Condition S1.C.1a. replaces "pit design" with "excavation and/or mining depth" with no definition or explanation as to whether this language is intended to expand the exclusion.

The Draft SGGP revisions to Special Condition S1 create unnecessary ambiguity and confusion. Special Condition S1.C. lists facilities excluded from permit coverage.

The condition's language was revised to read:

"Ecology will not provide coverage under this general permit for activities listed in **Special Condition S1.A and S1.B** when a facility: a) [h]as a pitan excavation and/or mining depth design that will intercept more than one aquifer vertically.⁸

"Pit design" as currently understood by WACA (since it is not defined in the permit) means an excavation for the purposes of mining. It is unclear whether Ecology's change to "an excavation and/or mining" language phrase is intended to expand existing language to also exclude facilities with non-mining excavations (for example certain utility trenches or construction foundation footings) when they intercept more than one aquifer. If that is the case, the impact would be substantial. Said another way, a facility could have an excavation that penetrates two aquifers (such as foundation footing) even though the pit design does not. Would that facility under the proposed language now lose coverage?

Ecology must clarify the purpose of this change and what it applies to. Depending on Ecology's intent, the scope and impact of the new language also needs to be further considered by Ecology.

1. S1.C.1b&c now appear to apply to all discharges to 303(d) listed waterbodies even if the listed pollutant is not being discharged.

Under the existing permit language, facilities that discharge to a segment of a 303(d) listed waterbody and discharge the listed pollutant to the listed segment are excluded from coverage, if that discharge will cause or contribute to a violation of the applicable water quality standard.

Condition S1.C.1b & 1c, however, were revised as follows:

⁸ Bolded words indicate added/redlined language in the Draft SGGP.

Ecology will not provide coverage under this general permit...when the facility:

- b) "Discharges to a water body with a Total Maximum Daily Load (TMDL) for turbidity, fine sediment, pH or temperature approved by the US Environmental Protection Agency (EPA) unless: the permitteefacility complies with S3.F.3-6..."
- c) Discharges or proposes to discharge to a segment of a waterbody that is listed pursuant to Section 303(d) ofwater body on the current US EPA approved Clean Water Act, section 303(d) list, but without an EPA-approved TMDL..."

As to section (b), it is unclear if Ecology's intent is to exclude all discharges to 303(d) listed waterbodies even if the listed pollutant is not being discharged. Ecology should clarify the purpose of this change and what it applies to.

As to section (c), the revisions add language that addresses listings with and without an established TMDL. Under both scenarios, certain discharges to a 303(d) listed waterbody, rather than to a segment of a waterbody are excluded from coverage. It is unclear if this is an error, or if Ecology intended to apply new requirements to facilities that discharge to waterbodies where *any segment* of the waterbody is 303(d) listed, regardless of discharge location.

Further, under section 1.c.ii the following language is added:

"Ecology determines [when] that facility does not and discharges or proposes to will not discharge a listed pollutant at concentration or volume that will cause or contribute to a violation of the applicable water quality standard an impairment.

As currently drafted, it is unclear how this applies or will be implemented in practice. Not only is this draft language entirely open ended, but is unclear in relation to the TMDL process. Developing a TMDL is a specific calculation of the maximum amount of pollutant that can enter a waterbody without causing impairment. States develop TMDLs per regulation, with stakeholder participation and input. Does this section refer to that process or something else entirely? Ecology should clarify the scope of this change and what it applies to.

E. Several New Permit Conditions Include Excessive and Unclear Reporting Requirements Without Support of Justification.

The following new reporting requirements are unclear, unsupported and impose an unreasonable administrative burden, without clear benefit to water quality.

1. S5.D.3 proposes new map requirements including unlined impoundments and infiltration ponds which are often temporary and in constant flux at aggregate facilities as mining progresses.

The Draft SGGP proposes new map requirements in Special Condition S5.D.3, including unlined impoundments and infiltration ponds which are often temporary and in constant flux at aggregate facilities as mining progresses. While it is reasonable to map permanent water management

features and monitoring points, the additional requirements that would apply to temporary, impermanent and rapidly changing features will create an impossible compliance situation for permittees who will attempt to continually update maps to capture unremarkable, impermanent features.

2. S9.C.4 significantly expands the existing documentation requirements for spills to include before and after photographs, the exact timing of clean-up actions, and staff involved in the clean-up process.

This condition significantly expands the existing documentation requirements for spills to include before and after photographs, the exact timing of clean-up actions, and staff involved in the clean-up process. No basis or justification for this burdensome requirement is provided with the draft permit materials WACA is aware of one single spill event at one permitted facility during the current 5-year permit cycle. A one-time event is not sufficient to justify this level of documentation on an entire industry.

If Ecology has evidence of observed, industry-wide spill events and inadequate actions to address such spills, that these changes will address, WACA welcomes that information. WACA also supports facility-specific enforcement by Ecology where a facility has not met its compliance obligations. But, as provided in the draft language it is unreasonable to require the *exact* timing of clean-up or for all operators to carry cameras. The priority should be cleaning up the spill and not fetching cameras and notepads to write down the exact minute.

3. S10.B requires submission of the Fiscal Year Sand and Gravel Production Reporting Form which appears duplicative of the Production Reporting Form and the Production and Operating Verification Form

This draft condition requires submission of a Fiscal Year Sand and Gravel Production Reporting Form. It is unclear whether this specific Form replaces or is to be combined with the Production Reporting Form and the Production and Operating Verification Forms. If not combined with (or replacing) a current form, this would be duplicative and would impose additional costs on permittees when a clearer, more streamlined process could be made available. Separately, WACA is concerned that overlapping or very similar forms could result in potential violations if one form is missed or is late, but identical information has been provided in a similar form. WACA requests a clearer, more streamlined approach.

4. S10.C requires permittees to retain and document the pre- and post-treatment conditions of water in their DMRs. The language is unclear because it is not possible to measure this at non-batch treatment systems.

This draft condition appears to require permittees to retain and document the pre- and post-treatment conditions of water in their DMRs. This draft language is unclear and vague. Depending on what Ecology considers pre- and post treatment conditions, this could include

additional monitoring and sampling requirements. It's not clear Ecology's has authority to require monitoring of water conditions for water retained on site and not discharged to waters of the state. But also, it is not possible to measure this at non-batch treatment systems like carbon dioxide sparging where constant rate treatment occurs concurrent to release. WACA requests this language be removed.

5. S11.G requires an annual report using Ecology's prescribed form ECY 070-91 without justification for the administrative burdens this would impose.

WACA questions the necessity and value of this draft revision which requires preparing and submitting an annual report that merely certifies compliance with existing requirements and provides no substantive new information. Requiring yet another report in a permit that already requires many submittals already, is duplicative and burdensome. If the intent is to confirm continued compliance, alternative mechanisms, such as periodic inspections are far more effective.

IV. Specific Comments on Special Condition SGGP Revisions

- A. Special Condition 1 Permit Coverage
 - 1. S1.B coverage for similar facilities should be determined based on the primary use at the site, consistent with other regulatory agencies.

Facilities covered under the SGGP are commonly mixed-use operations having multiple industrial activities that are codependent and/or complimentary to one another. But, SGGP coverage should be determined based upon the primary use at the site, consistent with other local, state and federal regulations. *See* Table 2 in the draft SGGP. The Draft SGGP's revised Special Condition S1.B states that in addition to the activities listed in Table 2 (which includes the NAICS/ECY Codes covered by the permit) Ecology may require facilities "conducting similar activities" to obtain coverage under the general permit.

It is not clear what is meant by "conducting similar activities" here. Does this include auxiliary or ancillary uses? WACA understands that, in rare instances, a site use may not be suitable for the SGGP because it has very distinct effluent characteristics, but to avoid confusion Ecology should include criteria for evaluating facility similarity or otherwise define "similar facilities." Furthermore, under what circumstances "may" Ecology require such facility to obtain coverage? The factors or standards that Ecology would use to make such a determination are entirely lacking from the draft. The lack of clarity creates an opportunity for inconsistent enforcement, and may force some facilities to have to seek costly individual permits.

2. S1.E.2a. should reference ECY Codes if Ecology intends permittees to notify the appropriate regional office when ECY Code activities are added, removed, or revised.

Ecology added the term "NAICS Code" activities to Special Condition S1.E.2a. Under that condition, permittees must notify the appropriate Ecology office to add, remove or revise authorized "NAICS Code" activities listed on their cover page. If Ecology intends for permittees to also notify the appropriate regional office when ECY Code activities are added, removed, or revised the language should be revised to reflect that.

B. Special Condition 2 – Effluent Limits

1. S2.A.1.d and S2.B.1.c impose undue reporting burdens for oil sheen that are not supported by evidence or study.

Ecology added extensive new requirements to Special Condition S2.

Special Condition S2.A.1 and S2.B.1.c require permittees to comply with effluent limits and monitoring requirements for process water and mine dewatering water discharges to surface waters and groundwaters. Specifically, draft language in S2.A.1d. and S2.B.1.c would require all permittees conduct "daily visual monitoring" at "all discharge points for visible oil sheen or petroleum products" and "to ensure neither are present" when the discharge is occurring. Ecology's draft language further states that the presence of a visible sheen is not a violation if there is no discharge of sheen or petroleum product, and if the Permittee corrects the problem in a timely manner, notes the occurrence in a notification to the regional permit manager, explains the cause, and describes solutions.

This condition does not make sense for two reasons: First, visible oil sheen at a discharge point is not in itself a violation. This requirement to notify Ecology every time a Permittee sees visible oil sheen or petroleum is arbitrary and creates an unnecessary administrative burden for permittees and Ecology alike. Further, a notification process for reporting permit violations already exists. Requiring a separate notification to a regional permit manager when an oil sheen at a discharge point when a permit violation has not occurred is unnecessary as there is no discharge and no violation, and no threat to health or the environment. Instead of creating an arbitrary extra requirement, Ecology could continue to require documentation through quarterly DMR reports submitted via SecureAccess.

Further, the language here (and elsewhere in the Draft SGGP) conflates "discharge point" and "monitoring point" seemingly converting all discharge points to monitoring points. However, monitoring points are distinct. By doing so, the Draft SGGP adds new, substantive daily monitoring requirements at all discharge points. If one applies the proposed definition of "discharge point" in Appendix B, the daily oil sheen monitoring requirement applies to every permeable surface that allows water to infiltrate, percolate, or potentially percolate to groundwater. It is unrealistic, impractical and arbitrary for permittees to monitor every single, unpaved location where water may infiltrate.

<u>Proposed Language:</u> "All permittees must conduct daily visual monitoring for oil sheen at all monitoring points where a discharge is occurring. No discharge is allowed if oil sheen is present."

C. Special Condition 3 – Additional Discharge Limits

1. S3.D.3.a & S3.D.3.b Should not be required without scientific justification.

The Draft SGGP proposes new, sweeping prohibitions of process water discharges from six new industrial codes without scientific justification. An essential component of developing and updating a draft general permit whose conditions will be imposed upon a wide range of operators is that those conditions are based upon sound science and data. Yet, Ecology provides no supporting data, and no rationale for the addition of six new industrial codes in S3.D.3.a. Ecology further provides no support for the Draft SGGP's blanket requirement that all process waters from these operations be routed to lined impoundments, designed to meet the 10-year, 24-hour storm event.

S3.D.3.a reads: "This permit prohibits the direct discharge of process water from concrete operations (NAICS Codes 327320, 327331, 327332, 327390, and 327999) and asphalt batch plant (NAICS Code 324121) to waters of the state, these process waters must be stored in a lined impoundment and treated prior to discharge."

When WACA asked Ecology what the basis is for this new language at the September 30 and October 6 meetings, Ecology provided no actual evidence or support for this change. Instead, Ecology simply stated the agency wanted to capture industry operations due to some undefined potential for increased pH in waters. When asked what the basis for that concern was, Ecology merely stated the agency "used its best professional judgement" to expand permit applicability because Ecology "presumes" that these other codes will have impact to water quality. This is entirely insufficient to support these proposed changes.

As WACA has previously informed Ecology, the operations that occur under those industrial codes are primarily concrete pre-cast manufacturing which do not generate large volumes of pH-impacted process waters because those operations do not use mixer truck washing or load tempering. Instead, process water within these operations include water used for dust control, water used to cool aggregate materials, and water used to wash paved areas which, in many cases, are unlikely to contain either pollutants or concentrations of pollutants requiring treatment in engineered lined impoundments. Additionally, many pre-cast operations occur indoors or under cover and the roof or equivalent prevents rainfall from accumulating in these areas and negates the need for lined impoundments designed to the storm standards above.

Ecology's vague concern about some potential of some amount of pH in waters is unfounded and not based in reality. These proposed conditions are unnecessary and will result in significant expense without any measurable demonstration that they would actually improve or protect water quality. Ecology's decision to impose permit conditions must be supported by some

analysis and data. *See Copper Dev. Ass'n*, PCHB Nos. 09-135–09-141, COL 31 (Apr. 25, 2011). This proposed condition is devoid of such support.

Further, S3.D.3.b's proposed requirement that all discharges of concrete solids and concrete truck washout must be to a lined impoundment is both unnecessary and not best practice. It is unnecessary because comeback concrete cures within hours and does not readily release any free liquids during curing to be captured. It is not best practice because unhardened concrete solids, which include comeback concrete, and concrete truck washout are often discharged to onsite reclaimers. These systems generally have impermeable detention capacity, designed to recover reusable sand and aggregates while retaining concrete solids and water. Reclaim systems reduce waste and extend the life of natural aggregate deposits, but do not typically meet the definition of lined impoundment and prohibited discharge locations under the draft permit. And, the proposed requirement would prevent operators from manufacturing concrete blocks or other pre-cast products unless the pre-cast forms are placed in a lined impoundment that is routed to a treatment system and designed to meet the 10-year, 24-hour storm requirements.

WACA believes the existing permit conditions fulfill Ecology's intent, protect water quality and are more in line with actual operations. Under the existing permit, comeback concrete can be stored or windrowed onto a bermed, impermeable surface. This approach is protective, and feasible. Ecology should revert to this approach.

And, the use of the term "discharge" to describe the placement of unhardened concrete solids is confusing and unclear. Discharges are typically understood to be discharges of water under the permit. Placement or storage, as used in S8.E.9., is clearer.

2. S3.D.4 mined pit ponds are not surface waters of the state until site closure.

Under proposed new S3.D.4., discharges to a mined pit pond are not required to comply with TSS and turbidity limits prior to final reclamation. The Draft SGGP revises the second portion of this condition to require that, once reclamation is complete, all discharges to the pond must not exceed TSS and turbidity effluent limits. This new requirement is inconsistent with Department of Natural Resources ("DNR") practice of encouraging phased or segmental reclamation where some areas of an active site are being reclaimed while others are still actively mined. Therefore, some areas of a mined pit could reach final reclamation while other areas are being actively worked. Therefore, reclassifying a mined pit pond as surfaces waters of the state prior to site closure is premature.

WACA proposes the following language: "Mine pits shall be classified as surface waters of the state when final site reclamation is complete, and permits have been released."

3. S3.E limits permittees ability to treat water, contradicts longstanding practice, and is without scientific backing.

Revisions to S3.E would impose burdensome requirements on permittees despite the fact that standard water treatment chemicals and processes have not changed since the inception of the SGGP, and those processes are well known to Ecology. Ecology provides no data or evidence to support this broad, unnecessary change to longstanding practice, especially where the current version of the permit already includes documentation requirements, application limitations, and notification requirements for the use of longstanding water treatment options. Ecology must provide some scientific or technical basis. *See Copper Dev. Ass'n*, PCHB Nos. 09-135–09-141, COL 31 (Apr. 25, 2011).

The proposed language in Section 3.E strips operators of the necessary flexibility to implement an adaptive water treatment process in order to meet stringent permit discharge requirements. Unlike experiments that occur in a controlled laboratory environment, industrial wastewater treatment is not a formulaic process. External factors such as temperature, receiving water chemical composition, and precipitation can change effluent characteristics such as buffering capacity thereby necessitating adjustments to the dosing rate, application method, and treatment method. Permittees, as subject matter experts on their industrial processes and water treatment systems, require flexibility to respond to rapidly changing conditions without delaying for Ecology review.

Furthermore, there are multiple commercial names and sources for treatment chemicals with the same compositions. Requiring the commercial name and source to be documented as part of the Chemical Use Plan will necessitate plan updates any time a change to either the source or commercial name is made. Similar to name-brand groceries and generic versions of the same thing, changing the source or commercial name is not analogous to a new chemical and should not be required in the plan. Additionally, submittals are required for "significant changes" to previously reviewed chemicals, but significant changes are not defined forcing permittees to guess what the threshold for that is. Does changing to a generic version count?

WACA recommends a different approach that involves creating industry specific BMPs. Doing so would be less burdensome but would still address chemical water treatments at regulated sites. Treatment of high pH stormwater prior to discharging is already required by Stormwater Management Manuals (SWMMs) while the practice of treating high pH water by adding food grade vinegar (acetic acid) or carbon dioxide sparging and treating solids by flocculation have both been vetted and approved by Ecology (for example in the Stormwater Management Manuals). When combined with the existing BMP C252 (which extensively addresses carbon dioxide sparging and food grade vinegar pH adjustment), such industry specific BMPs would address nearly all chemical water treatments at SGGP sites. This would eliminate what would be an onerous burden on permittees for practices already well known to Ecology. It would also save Ecology significant administrative burden of reviewing hundreds, if not thousands, of new Chemical Use Plan. WACA and its members stand ready to work with Ecology to develop these industry specific BMPs.

4. S3.F.1 & G.1 are narrative standards that must be tied to objective, measurable criteria, which currently they are not.

Narrative standards must be tied to objective, measurable criteria. These two conditions are not. And the proposed language exposes permittees to arbitrary enforcement actions.

- S3.F.1 reads: Discharges must not cause a *visible* increase in turbidity or, *objectionable* color or discoloration, *change in odor*, *observable film*, scum; or cause *visible oil sheen* or grease in the receiving water.
- S3.G.1. reads: There must be no *visible* oil sheen or grease *present* at any points of discharge to groundwater.

Terms like "objectionable" or "film" are not objectively measurable and lack any type of scientific criteria. Arbitrary, unclear and unmeasurable conditions such as these are unenforceable. *See City & Cnty. of San Francisco, California v. EPA*, 604 U.S. 334, 355, 145 S. Ct. 704, 720, 221 L. Ed. 2d 166 (2025) (prohibiting vague end result requirements). WACA recommends Ecology either clarify the criteria or remove this language.

5. S3.F.2 & G.3 prohibiting the discharge of soap-impacted waters lacks scientific evidence and contradicts and ignores the BMP framework.⁹

The SGGP compliance framework is predicated on the implementation of best management practices ("BMP"). BMPs are "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices" that are designed to "prevent or reduce the pollution of the waters of the state." WAC 173-226-030(3).

The prohibition on soap-impacted waters in S3.F.2 and S3.G.3 ignore and contradict this approach by disallowing discharges regardless of the BMP implemented, and regardless of any evidence of water quality impacts. The Draft SGGP does not provide any scientific justification for this prohibition, nor has Ecology provided any basis in follow up conversations. At the September 30 meeting, Ecology stated it believes that soaps mobilize all contaminants in soils, and therefore this change is a precautionary measure. Ecology provided no data or analysis to back this draconian new requirement up apart from its "belief." Where permit conditions lack data to support the new condition, the condition is unreasonable. *See Copper Dev. Ass'n*, PCHB Nos. 09-135–09-141, COL 31 (Apr. 25, 2011); *Associated Gen. Contractors*, PCHB Nos. 05-157–05-159, COL 17, 24 (June 4, 2007).

At the October 6 meeting, Ecology also seemed to indicate that if industry needed to use "soaps" (and Ecology seemed to mean all soaps regardless of composition) an individual permit would be needed. If this is what Ecology will require Ecology should confirm that in its response to comments. This prohibition would be significant, and would impose an enormous new burden on the industry.

-

⁹ See also discussion of this proposed condition on p. 4; *Supra* Section III.C.

6. S3.G.3 conflicts with Appendix B and S8.E.8 creating inconsistencies and ambiguities regarding the definition of soap and soap impacted waters

Separately, Special Conditions S3.G.3 and S8.E.8 impose inconsistent and ambiguous new requirements regarding the definitions of "soap" and "soap-impacted" waters. Appendix B defines "soap" as "any type of cleaning agent or foaming agent that contains surfactants capable of reducing the water's surface tension, enabling water to mix more easily with oils, dirt, and other contaminants. This definition encompasses the broad chemical family group of soaps, surfactants, synthetic detergents, emulsifiers, and any other foaming agent." The definition then states that "Non-biodegradable, phosphate containing, or nonylphenol ethoxylates containing soaps are prohibited from discharge to waters of the state."

As WACA understands this definition, biodegradable soaps that do not contain phosphates or nonylphenol ethoxylates are permitted for discharge to waters of the state. However, Section S3.G.3, which addresses discharges to groundwater, prohibits the discharge of "soap-impacted" water to waters of the state. Similarly, Section S8.E.8, which pertains to truck washing, prohibits the discharge of "soap-impacted" water to groundwater. These proposed conditions create a conflict between the definition in Appendix B and the prohibitions in Sections S3.G.3 and S8.E.8 as "soap-impacted water" is defined as "water affected by any natural or artificial soaps, synthetic detergents, emulsifiers, surfactants, or other foaming agents. Such soap-impacted waters are classified as process waters."

The language in Sections S3.G.3 and S8.E.8 be revised to allow the discharge of water impacted by biodegradable soap that does not contain phosphates or nonylphenol ethoxylates. This would be consistent with the definition of "soap" provided in Appendix B. Alternatively, WACA requests that the term "soap-impacted water" be redefined in Appendix B to exclude water that has been in contact with biodegradable soap free of phosphates and nonylphenol ethoxylates, thereby aligning the permit's definitions with its discharge provisions.

7. S3.G.2's proposed groundwater discharge provisions that indicate any water on any permeable surface is a discharge to ground are vague and unclear.

S3.G.2 has been revised to read that "Ecology may consider water on permeable surfaces and not conveyed to a monitoring point" to be discharge to groundwater. This language is vague, unclear and inaccurate. Pooled water on a permeable surface does not mean a discharge to groundwater has or will occur. And this interpretation is completely inconsistent with the Stormwater Management Manual's approach which states that "passive percolation of a limited volume of pH-affected stormwater is acceptable," with the understanding that it does not "pond." WACA was disappointed to see this draft language make it into the draft permit as WACA understood

¹⁰ See 2024 Stormwater Management Manual for Western Washington, Volume II, Chapter 4 at p. 450; Volume V, Chapter 5 and Appendix I-B, *available at:* https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/stormwater-permittee-guidance-resources/stormwater-manuals

that it had reached agreement with Ecology during previous permit cycles that inspectors should refrain from puddle testing and adopt a basin focused approach. Puddle monitoring is impractical, overly burdensome, and not protective of water quality. This provision should be removed.

8. S3.I's use of and inclusion of the term "processing" is vague and unclear.

At inactive sites, in addition to no excavation, "processing" is now also disallowed. "Processing" is not defined. Processing, as understood by WACA, generally can include rock crushing, sorting, or separating a single boulder from a large stockpile. Did Ecology intend to exclude those activities? If so, that interpretation would be counter to longstanding and acknowledged practice that permittees can remove material from existing stockpiles without generating process water. WACA requests Ecology clarify what activities Ecology intends to include under this broad, and currently vague and undefined term "processing."

D. Special Condition 4 – Monitoring Requirements

1. S4.A.1 and S4.B.1 prescribe monitoring locations that do not evaluate specific factors and may or may not be representative depending on the site.

The Draft SGGP requires case-by-case selection of representative monitoring points because "many factors contribute to the variability of pollutants in a discharge including...physical events and location of a discharge." Draft SGGP Appendix B. WACA agrees with this approach and finds it pragmatic. However, and in direct conflict with this approach, S4.A.1 and S4.B.1 prescribe monitoring locations that do not evaluate those factors, and may or may not be representative depending on the site.

The language also requires monitoring the receiving waters instead of the effluent and fails to provide guidance for offsite discharges that may not be accessible. Permit conditions cannot be unduly vague, lack clarity or unduly ambiguous. *City & Cnty. of San Francisco v. EPA*, 604 U.S. 355 (2025). WACA recommends removing this inconsistent and legally questionable requirement.

2. S4.A.4 imposes a new monitoring requirement for Hexavalent Chromium that is not scientifically justified. No data suggested that Hexavalent Chromium is present in significant concentrations – or at all.

S4.A.4 requires that permittees discharging process waters to a surface water conducting certain NAICS Code activities must collect, analyze, and report to Ecology the dissolved hexavalent chromium concentration at a minimum frequency of once per month. This new condition lacks any scientific support and ignores logistical challenges including hold time and laboratory

availability, both of which prevented required data from being collected for the Study described below.

As early as 2024, Ecology committed to completing and publishing a technical memorandum and accompanying statistical analysis to support the Draft SGGP's development. WACA participated in and facilitated that study, the Concrete Manufacturing and/or Recycling: Statewide Effluent Characterization Study ("QAPP Study"). Ecology stated as part of the Study's Quality Assurance Project Plan ("Plan") and Focus Sheet¹¹ that upon completion of the sample collection field work, Ecology would perform data analysis on lab results and prepare a final technical memorandum, that the published technical memorandum on the characterization study would help inform the development of the 2026 general permit, and Ecology would publish the results of the study as a technical report in early 2025. Ecology did none of the above.

The QAPP Study is not yet complete, but it does not propose analyzing Hexavalent Chromium. Nor is there any indication that Hexavalent Chromium is present in significant concentrations—or at all. When asked at the September 30 meeting what Ecology relied on to support the Hexavalent Chromium change, Ecology stated it relied on a study for Portland Cement (one site) and the unpublished, unfinished (currently internal) QAPP leachate study. Ecology will not share either study, and there is no indication either study underwent independent peer review. That is astounding and unlawful. Where permit conditions are not founded on sufficient scientific or technical basis, or lack data to support the new condition, the condition is unreasonable or arbitrary and capricious, and cannot be upheld. *See Copper Dev. Ass'n*, PCHB Nos. 09-135–09-141, COL 31 (Apr. 25, 2011); *Associated Gen. Contractors*, PCHB Nos. 05-157–05-159, COL 17, 24 (June 4, 2007).

Further study is needed before a condition of this scope and breadth can be imposed. 12

3. S4.B.4 requires TDS benchmark monitoring without any data or support.

Ecology has not provided sufficient data to support the proposed new TDS monitoring and benchmark reporting at NAICS 212321 facilities in a Wellhead Protection Area, sole source aquifer, or Critical Aquifer recharge Areas ("CARAs"). It is also important to note that CARAs are locally defined, so each local jurisdiction will differ. Inconsistencies across counties could lead to inconsistent enforcement between sites based on the county they're located within. Any permit condition with such a requirement must include language that considers differences in the

¹¹ See Quality Assurance Project Plan, Ecology Draft Publication No. 24-10-001 at 1, 6 (stating "After completing the study, Ecology will post the final report of the study to the Internet." available at: https://apps.ecology.wa.gov/publications/summarypages/2410001.html.

¹² While meeting with Ecology, WACA offered funding for a study that would do just that conducted by a third-party approved by Ecology. After some back and forth, Ecology did not follow up or respond to the offer as promised. WACA-Ecology Virtual Meeting on June 12, 2025; *See also* WACA Letter to Ecology dated June 9, 2025.

local jurisdictions so that potential enforcement is not inconsistent. WACA requests Ecology take that into account for this permit condition.

Ecology has not provided any clear data that indicates discharges from SGGP facilities are sources of TDS or that TDS discharges from SGGP facilities impact water quality. Ecology appears to rely on the incomplete, unpublished QAPP Study referenced above, but again Ecology refuses to share that Study and it is not complete. Even if it was, the samples are not representative.

As part of the QAPP Study, 102 samples were collected from 7 facilities, and 13 samples were collected to study comingled sand/aggregate and concrete waters. Of those 13 samples, only 5 samples had elevated TDS results. Those 5 samples are not representative because the field sheets generated during the Study do not document whether water at a given sample location is comingled. Ecology has provided no other documentation to demonstrate that it is. WACA identified this potential issue to Ecology in a letter ahead of the QAPP Study's initiation noting that "the field log should also include information about the industrial activities contributing to the sample point and a description of the sample point location on the facility." But, Ecology ignored this suggestion.

The field logs only include a sample location, and NAICS industrial codes assigned to the site's monitoring points. This is not an indication of the water source or if waters sampled were comingled for two main reasons. First, Ecology did not collect all samples at monitoring points and did not record industrial codes or activities occurring upstream of non-monitoring point sample locations. And second, industrial codes are indications of what activities may occur at a facility, not necessarily what activities are occurring at a facility. Ecology's study must be based on the activities actually occurring on site to be representative. For example, at co-located facilities a given monitoring point may have industrial codes related to mining and concrete manufacturing but not regularly perform those activities and/or may not have performed those activities at or around the time samples were collected. In this instance, the field sheets would indicate that the samples were comingled, but the samples would only represent what activities were occurring during or close in time to the sampling. Ecology is essentially assuming comingling based on codes, but not based on what is happening on the ground. Identifying comingled samples isn't possible from the information that Ecology recorded.

Further, Ecology's analysis appears to ignore known background concentrations unrelated to onsite activities. Of these 5 samples that had elevated TDS results, at least one facility has known background concentrations of TDS, unrelated to the onsite activities. This is known, and the site has been acknowledged by Ecology¹⁵ as a known outlier. Yet, Ecology inexplicably relies on it as evidence of comingled water driven TDS elevation. Furthermore, many aquifers in Washington naturally exceed 500 mg/L TDS due to natural geology, natural background or other reasons unrelated to onsite activities.

¹³ WACA-Ecology Virtual Meeting on September 30, 2025.

¹⁴ See WACA CMR Study Notification Letter to Permittees dated February 21, 2024.

¹⁵ Virtual Meetings with Ecology on August 28, 2024 and September 30, 2025.

Ecology should take each of these issues into account and fully evaluate the source for all samples with elevated TDS prior to drawing conclusions. Failing to do so is arbitrary and capricious and cannot support this permit condition change. Each permit condition must be supported by sufficient scientific or technical basis. *See Copper Dev. Ass'n*, PCHB Nos. 09-135–09-141, COL 31 (Apr. 25, 2011); *Associated Gen. Contractors*, PCHB Nos. 05-157–05-159, COL 17, 24 (June 4, 2007). Further a study with 5 samples showing elevated TDS is statistically insignificant and does not support the new monitoring and benchmarking requirement.

If implemented, this TDS monitoring requirement would increase every eligible facility's lab and labor costs exponentially including the costs to collect, analyze, and transport samples. These costs will vary by facility depending on the number of monitoring points, transportation distance, lab fees and more, but facilities can expect to pay a minimum of \$2,000 annually to sample a single monitoring point according to this new requirement.

Ecology cannot add such a costly and site altering change without evidence that demonstrates there is actually a problem. As described above, Ecology failed to meet that requirement here.

E. Special Condition 6 - SMP Section 1: Erosion and Sediment Control Plan

1. S6.A&B stormwater design standards should be applied on a basin wide basis and focus on permanent infrastructure

The Draft SGGP expands stabilization requirements and demarcation areas without any analysis as to how these conveyance-ditch specific designs are beneficial. Instead, design standards should be applied at basin-level, and not to individual and often temporary conveyance structures. Individual conveyance structures like ponds and ditches change constantly at a sand and gravel site.

These new conditions appear to require operators to redesign these conveyance structures on a daily basis to meet engineering standards and site needs. That just isn't feasible. The process to evaluate, redesign, and reconstruct all individual conveyance structures would impose astronomical costs on permittees without any clear benefit. Further, it would require near-constant measurement and maintenance for temporary conveyances that are often temporary anyways, thereby further increasing facility costs. This condition does not provide any identified environmental benefits and lacks scientific basis. Permit conditions must be supported by sufficient scientific or technical basis. See Copper Dev. Ass'n, PCHB Nos. 09-135–09-141, COL 31 (Apr. 25, 2011). Ecology should remove this addition.

F. Special Condition 7 – SMP Section 2: Monitoring Plan

1. S7.B notification and a separate form should not be required for modifications to monitoring points

S7.B is revised in the Draft SGGP to require permittees "contact the regional Ecology contact to update their monitoring plan, and submit a Monitoring Point Update Form (ECY 070-793)" any time there is a modification, addition, or deletion of a monitoring point. Previously, the permit simply required the monitoring report to be updated. This additional burden to notify Ecology of

every modification to a monitoring point, and then fill out a separate, extraneous form is unnecessary and burdensome. Permittees currently identify representative monitoring points based on specific knowledge and understanding at each site. They then draft their monitoring plans accordingly. Monitoring plans are always available to Ecology upon request. WACA is concerned that if a monitoring point changes on a site, and the permittee must now notify and obtain Ecology review before updating the plan there will be a period of time where the monitoring point physically changed but the plan is inaccurate. WACA requests that Ecology clarify its meaning here.

Separately, the following language that reads: "If the Permittee is unable to convey the stormwater to a monitoring point prior to discharge, additional discharge points may be required to consider the sampling as representative" is unclear. What action, if any, does Ecology anticipate from the permittee to comply with this?

G. Special Condition 8 – SMP Section 3 – Stormwater Pollution Prevention Plan

1. S8.B and S8.E - Ecology's use of "impermeable" and "permeable" are regulatory outliers and inconsistent with federal regulations at 40 CFR Part 122.

The Draft SGGP uses the terms "impermeable" and "permeable" and later defines them in Appendix B. These terms are confusing to WACA for two reasons. First, they are regulatory outliers. They are not consistent with how other regulators, like EPA, ¹⁶ and as another example, California's General Permit for Stormwater Water Discharges Associated with Industrial Activities, use similar terms. Both use the terms "impervious" and "pervious." Second, the Draft SGGP uses these terms interchangeably. From Appendix B, that might be Ecology's intent to have impermeable surface and impervious surface have equal meaning, but using them interchangeably within the same special condition causes unnecessary confusion.

For example, in Special Conditions 8B Ecology uses the term "impermeable" but in Special Condition 8E Ecology uses the term "impervious."

- Special Condition 8B states for example: For a surface to be considered an impermeable surface with no discharge to groundwater, the surface must be constructed of [the listed materials].
- Special Condition 8E states for example: Store unhardened concrete, any type of unhardened concrete solids (does not include fully cured or recycled concrete), returned asphalt, and cold mix asphalt on a bermed impervious surface.

Ecology should remove and replace the terms "impermeable" and "permeable" with "impervious" and "pervious" in order to avoid confusion, and to align with established regulatory approaches and definitions.

¹⁶ 40 C.F.R. Part 112. Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122?toc

2. S8.E.1.c prohibition on lined impoundments lacks any scientific support or justification.

The Draft SGGP's new prohibition that lined impoundments cannot both detain wastewater and act as secondary containment for onsite chemicals lacks any justification and should be removed. It is common practice and consistent with 40 C.F.R. Part 112, to design lined impoundments to achieve both purposes. WACA is forced to ask what is Ecology's reason for deviating from established and authorized practice? To date, Ecology has provided no justification for doing so. Lack of any data or basis for this new prohibition is unlawful. *See Copper Dev. Ass'n*, PCHB Nos. 09-135–09-141, COL 31 (Apr. 25, 2011); *Associated Gen. Contractors*, PCHB Nos. 05-157–05-159, COL 17, 24 (June 4, 2007).

If Ecology is concerned with lack of freeboard in a dual-purpose lined impoundment, then that risk could be addressed by specific draft language requiring sufficient freeboard to be maintained in lined impoundments when acting as secondary containment. But an outright, total ban is contradictory to established permitting practice and should be removed or revised as suggested here.

Further, the requirement is duplicative and, in many cases, unnecessary. For example, many precast and pipe operations are conducted indoors or under cover, where roofs or equivalent structures prevent stormwater accumulation. This architectural feature eliminates the need for storm event—designed lined impoundments. And, typically, unhardened concrete solids and truck washout are managed using onsite reclaimers—systems designed with impermeable detention capacity to capture concrete solids and water while allowing recovery of reusable sand and aggregates. These reclaimers, although effective in reducing waste and conserving natural resources, would not conform to the draft's definition of lined impoundments and would be prohibited.

3. S8.E.9's requirement to store materials on a bermed, impervious surface is overly prescriptive and unnecessary.

S8.E.9's draft language would require permittees to store unhardened concrete, any type of unhardened concrete solids, returned asphalt, and cold mix asphalt on a bermed impervious surface. This new requirement is overly prescriptive, unnecessary and ignores common and equivalent existing BMPs. It also does not take into account different sites or climates, and is particularly unjustified for facilities in eastern Washington, which experience vastly different annual rainfall, evaporation and curing rates. S8.E.9 should be removed.

Instead, the permit should establish performance standards for the storage of these materials and allow operators to meet those performance standards with a range of effective solutions. For example, to prevent water quality impacts, covering, grading, and installing trench drains could all provide equivalent protection. They would not qualify under the revised approach. WACA proposes reverting to the existing permit language which states "discharge of this water is subject to the effluent limitations in S2 and must not cause a violation of water quality standards." It is protective but also allows for appropriate flexibility in meeting the restriction.

4. S.8.F's revision to the exemption established on April 1, 2016 is confusing and contradictory.

Section S.8.F of the draft permit revises the exemption established on April 1, 2016 in a way that could have significant financial impacts on the concrete recycling industry. Under the existing permit, any operation with SGGP coverage prior to April 1, 2016 was exempt from the requirements in S.8.F.1.a through S.8.F.1.d. These requirements include:

- Prohibiting concrete stockpiles within 100 feet of surface water and domestic wells.
- Prohibiting concrete stockpiles within 10 feet of the groundwater elevation.
- Prohibiting stockpiles within a wellhead protection area unless a groundwater monitoring plan approved by the Department of Ecology is in place.

The Draft SGGP modifies this exemption by requiring that operations must have specifically had the *ECY002 NAICS code* prior to April 1, 2016 in order to qualify. This change is concerning because the ECY002 NAICS code was not introduced until the issuance of the 2016 permit. Therefore, it is unclear how any permittee could have met this requirement prior to that dateAnd even if the intent of this change is to limit the exemption to facilities that were recycling concrete before 2016, it still poses a major issue. Facilities that added concrete recycling—and the ECY002 code—to an already existing SGGP facility after April 1, 2016 may be immediately out of compliance upon issuance of the new permit, despite having operated in full compliance under previous versions.

The language in Section S.8.F should be retained as established in the 2016 permit. The original exemption criteria provided clarity and fairness for facilities operating in compliance prior to April 1, 2016, and the proposed revision introduces ambiguity and sudden non-compliance for longstanding, compliant operations.

5. S8.F.3. – Ecology already failed to support this condition in 2016 and 2021, and fails again in this draft permit

The Draft SGGP now requires simultaneous implementation of equivalent BMPs in a way that is duplicative and renders the other BMPs redundant. For example, requiring permittees to use a cover to prevent stormwater contact, while also requiring the placement of stockpiles on an impervious surface and the use of a pH adjuster, is duplicative, costly and does not make sense. Further, because BMPs already need to be consistent with engineering practices and the Stormwater Management Manuals, there does not appear to be any purpose to requiring Ecology approval in writing for BMPs that already meet those standards; certainly, Ecology has not provided any such purpose.

Ecology addressed this issue, acknowledged the difficulty to operations, and rejected a very similar revision in the last iteration of the permit. Ecology stated in its Addendum to Fact Sheet, Appendix A: Response to Comments (February 17, 2016) at Page 77:

"Ecology also considered the difficulty for existing Sand and Gravel permittees to implement the BMPs listed in S8.F.1 of the formal draft of the Sand & Gravel General Permit. Ecology agrees with the comment that BMPs may be more suitable for new facilities that can anticipate the BMPs in S8.F.1 and implement them before beginning operations. Ecology acknowledges the implementing the BMPs listed in S8.F.1 could disrupt existing permittees' current operations and could require site reconfiguration. Based on these considerations, Ecology has decided to revise the final permit to only require the BMPs in S8.F.1 for sites whom receive coverage for the first time on or after April 1, 2016 (the effective date of the new permit)."

Ecology provides no new information or justification for why the previously rejected condition has resurfaced in this Draft SGGP, and Ecology should (again) remove it.

H. Appendix B to the SGGP Introduces Numerous New Definitions to the Permit Scheme That Are Ambiguous, and Impermissibly Expand the Permit's Scope

The Draft 2026 SGGP introduces numerous new or revised definitions in Appendix B that create ambiguity, expand regulatory scope beyond the 2021 permit, and in some cases conflict with state law or federal NPDES standards. For example, terms such as "slows infiltration," "substantially completed hydration," and "reasonable time," lack measurable criteria and are vague; new definitions such as "soap," "soap-impacted water," "pH adjuster," and "wet scrubber" improperly add prohibitions or enforcement language; and added concepts like groundwater discharges and discharge points that sweep in puddles and infiltration expand and exceed Ecology's authority under RCW 90.48 and WAC 173-200. Other changes, like defining "site" and "facility" synonymously, and duplicating "substantial change" and "major modification," reduce clarity, inject confusion and inhibit necessary flexibility.

Overall, these definitional changes pose a risk of uneven and arbitrary enforcement, create compliance uncertainty, and impose costs not evaluated in the SBEIA. The definitions should be revised to use objective engineering or regulatory benchmarks, be consolidated where duplicative, and aligned with established standards other general permits. WACA provides the following suggestions:

Draft SGGP 2026 – Definitions Comments

1. Ten-Year, 24-Hour Storm

Draft 2026 Language: "Ten-year, 24-hour storm event" [term is used but not defined]. *Comment*: The draft permit uses this term without reference, which creates inconsistent interpretation across sites.

Suggested Language: "Ten-year, 24-hour storm event shall be based on NOAA Atlas 2 precipitation frequency estimates or site-specific hydrologic data approved by a licensed professional engineer."

2. Substantial Change

Draft 2026 Language: "Substantial Change means the addition of new industrial

processes or operations that significantly alter the nature of discharges and require permit reapplication."

Comment: "Significantly alter" is vague and does not give permittees clear thresholds for compliance.

Suggested Language: "Substantial change means an increase in disturbed area greater than 10 acres or greater than 10% of total, addition of new surface water discharge points, or change in site use such as adding asphalt, concrete, or recycling operations."

3. **Biodegradable**

Draft 2026 Language: "Biodegradable means capable of being broken down within a reasonable time."

Comment: The phrase "reasonable time" is subjective and unenforceable. Additionally, this is tied to the use of soap, which is banned making this definition superfluous. Suggested Language: "Biodegradable means a substance that decomposes by natural biological processes into water, carbon dioxide, and biomass within 28 days."

4. Lined/Unlined Impoundments

Draft 2026 Language: "Lined impoundment means an impoundment with an impermeable liner that meets S3.D.2 requirements."

Comment: The permit lacks objective performance standards, leaving too much room for interpretation.

Suggested Language: "Lined impoundment means an impoundment certified by a licensed professional engineer as impervious, or designed to be impervious i.e. commercial catch basins or constructed with six inches of asphalt, six inches of concrete, or a 40-mil synthetic liner."

5. Critical Aquifer Recharge Area (CARA)

Draft 2026 Language: "CARA means areas with a critical recharging effect on aquifers used for potable water."

Comment: The definition is overly broad and could apply outside mapped CARA areas. *Suggested Language*: "CARA means areas specifically mapped and designated under WAC 365-190-100 and adopted in county or municipal critical areas ordinances."

6. Critical Areas

Draft 2026 Language: "Critical Areas include wetlands, fish and wildlife habitat, frequently flooded areas, geologically hazardous areas, and CARAs."

Comment: This definition goes beyond the scope of the SGGP and overlaps with local land use regulation.

Suggested Language: Remove the definition of "Critical Areas" from the permit.

7. Frequently Flooded Areas

Draft 2026 Language: "Frequently flooded areas" [term used in critical areas definition]. *Comment*: Not defined and subject to broad interpretation.

Suggested Language: "Frequently flooded areas are those designated as within the 100 year flood plain."

8. Cured Concrete

Draft 2026 Language: "Cured concrete means concrete that has substantially completed hydration and is chemically stable."

Comment: "Substantially completed hydration" is vague and subjective.

Suggested Language: "Cured concrete means concrete that has cured for 24 hours under normal conditions or achieved a compressive strength of 1200 psi."

9. **Day**

Draft 2026 Language: "Day means a calendar day, including Saturday, Sunday and legal holidays

Comment: A limited window creates confusion for reporting and enforcement.

Suggested Language: "Day means a 24 hour period."

10. Discharge Characteristics

Draft 2026 Language: "Discharge characteristics" [undefined beyond general reference to water qualities].

Comment: This phrase is vague and unenforceable; it provides no compliance guidance. *Suggested Language*: Remove the definition of "Discharge Characteristics."

11. Discharge Point

Draft 2026 Language: "Discharge point means any location where water leaves a facility, including infiltration."

Comment: This goes beyond NPDES definitions, which limit discharges to points where water reaches waters of the state.

Suggested Language: "Discharge point means a location where stormwater or process water is released to waters of the state, consistent with the NPDES definition of outfall."

12. Dissolved

Draft 2026 Language: "Dissolved" [term defined in relation to sampling].

Comment: Needs clarity to match standard EPA methods.

Suggested Language: "Dissolved means the concentration measured after filtration through a 0.45-micron filter using EPA-approved methods."

13. Electronic Waiver Form

Draft 2026 Language: "Electronic waiver form" [referenced but not included in permit]. *Comment*: Allowing forms outside the permit makes compliance vulnerable to changes without stakeholder input.

Suggested Language: "All required forms shall be included as permit appendices to prevent changes outside the five-year cycle."

14. Groundwater Discharges

Draft 2026 Language: "Groundwater discharge means any discharge to the subsurface, including incidental infiltration."

Comment: This improperly includes puddles and natural infiltration, exceeding RCW 90.48 and WAC 173-200 authority.

Suggested Language: "Groundwater discharge means a direct discharge of pollutants to groundwater that may cause a violation of WAC 173-200 groundwater quality standards."

15. Impermeable Surface

Draft 2026 Language: "Impermeable surface means any surface that prevents or slows infiltration of water."

Comment: "Slows infiltration" is vague and sweeps in gravel and compacted soil.

Suggested Language: "Impermeable surface means a surface certified by an engineer as impervious, or constructed with six inches of asphalt, six inches of concrete, or a 40-mil liner."

16. Hardened Concrete

Draft 2026 Language: "Hardened concrete means concrete that has substantially completed hydration and is chemically stable."

Comment: "Substantially completed" is unenforceable and subjective.

Suggested Language: "Hardened concrete means concrete that has cured for seven days or has achieved a compressive strength of 1200 psi."

17. Inert

Draft 2026 Language: "Inert means a material that is chemically inactive and not expected to leach contaminants in reasonable quantities."

Comment: "Reasonable quantities" is vague and undefined.

Suggested Language: "Inert means a material that does not chemically or biologically react under normal environmental conditions."

18. Major Modification

Draft 2026 Language: "Major modification" [defined broadly, including wastewater treatment systems].

Comment: Including wastewater treatment discourages upgrades; only additions of industrial scale activities should qualify.

Suggested Language: "Major modification means the addition of surface water discharges, recycled materials processing, mining operations, asphalt production, or concrete manufacturing."

19. Minor Modification

Draft 2026 Language: "Minor modification" [undefined scope].

Comment: Needs to be tied to the inverse of major modifications.

Suggested Language: "Minor modification means any change that does not involve new surface water discharges, recycled materials processing, mining operations, asphalt production, or concrete manufacturing."

20. Nonionic & Nonylphenol Ethoxylates

Draft 2026 Language: Included under soaps.

Comment: Redundant because soaps are already prohibited.

Suggested Language: Remove reference to nonionic and nonylphenol ethoxylates from soap definition.

21. Permeable Surface

Draft 2026 Language: "Permeable surface" [defined independently].

Comment: Should be the inverse of impermeable for clarity.

Suggested Language: "Permeable surface means any surface not defined as impermeable."

22. Gravel Roads

Draft 2026 Language: "Gravel roads" included as permeable surface.

Comment: Counties treat gravel roads as impervious for stormwater fees; case law recognizes compacted gravel as impervious. Additional data shows this is impervious. Suggested Language: "Gravel roads are considered impervious surfaces for purposes of this permit."

23. pH Adjuster

Draft 2026 Language: "pH adjuster means a chemical used to modify water pH and must be applied consistent with permit conditions."

Comment: Definitions should not include use conditions.

Suggested Language: "pH adjuster means any chemical used to change the pH of water."

24. Process Water – Vehicle Washing

Draft 2026 Language: "Process water includes vehicle washing water."

Comment: This effectively prohibits all wash racks; rinsing should be distinguished. *Suggested Language*: "Process water does not include rinsing of vehicles with water only; vehicle washing with soaps or detergents is prohibited."

25. Quarterly

Draft 2026 Language: "Quarterly" defined with reporting requirements.

Comment: Too detailed for a definition.

Suggested Language: "Quarterly means a three-month calendar period."

26. Representative Sampling

Draft 2026 Language: "Representative sampling" references ISGP protocols.

Comment: Imports unrelated requirements and is too vague.

Suggested Language: Remove from Appendix B; address in monitoring section.

27. Significant Amounts

Draft 2026 Language: "Significant amounts" retained from 2021 but undefined.

Comment: Provides no measurable standard.

Suggested Language: Remove definition of "Significant Amounts."

28. Significant Process Changes

Draft 2026 Language: "Significant process changes" means modifications that may increase discharges or introduce similar processes.

Comment: "Significant" and "similar" are vague and unenforceable.

Suggested Language: Remove or consolidate into major modification definition.

29. Site / Facility

Draft 2026 Language: "Facility or site means the industrial facility or site covered by this permit. The terms are synonymous."

Comment: Making them synonymous reduces flexibility and is inconsistent with NPDES.

Suggested Language: "Site means the land area where a facility is located. Facility means the industrial operation. The terms are not synonymous."

30. **Soap**

Draft 2026 Language: "Soaps means any cleaning agent or foaming agent..." with prohibitions included.

Comment: Including prohibitions in definitions is inappropriate.

Suggested Language: "Soap means a cleaning agent containing surfactants."

31. Soap-Impacted Water

Draft 2026 Language: "Soap-impacted water means any water containing soaps or foaming agents."

Comment: Overly broad and sweeps in non-soap products.

Suggested Language: "Soap-impacted water means water containing soaps as defined above."

32. Substantial Change

Draft 2026 Language: Duplicated with major modification definition.

Comment: Creates overlap and confusion.

Suggested Language: Remove substantial change definition; consolidate into major modification.

33. Unhardened Concrete

Draft 2026 Language: "Unhardened concrete means concrete before it has substantially completed hydration."

Comment: Too broad and sweeps in slurry and fines.

Suggested Language: "Unhardened concrete means concrete slurry or wet mix prior to curing."

34. Wellhead Protection Area

Draft 2026 Language: References a state website link.

Comment: Web links can change, making compliance uncertain.

Suggested Language: "Wellhead protection areas are those designated in county-approved wellhead protection plans published under WAC 246-290-135."

35. Wet Scrubber

Draft 2026 Language: Includes enforcement references.

Comment: Enforcement references are inappropriate in definitions.

Suggested Language: "Wet scrubber means a device that removes particulates or gases from industrial exhaust using liquid."

V. <u>Comments on SBEIA</u>

A. The Small Business Economic Impact Analysis is Invalid and Cannot Be Relied Upon

To support Ecology's Draft SGGP, Ecology also issued its Small Business Economic Impact Analysis ("SBEIA") for public comment. Ecology is required under WAC 173-226-120 to prepare an SBEIA to assess whether the proposed permit changes would impose a disproportionate burden on small businesses. If such a burden is identified (which it was here), Ecology is then required to take steps to mitigate it.

WACA engaged an expert to perform an evaluation of the SBEIA, and the resulting report is attached as Exhibit A titled "Review of Department of Ecology's Small Business Economic Impact Analysis; Sand & Gravel Permit" (the "SBEIA Report"). The SBEIA Report identified "significant concerns with the report's methodology, particularly the cost calculation approach and the data sources used in developing the estimates." Exhibit A at 1.

The SBEIA Report concluded the SBEIA was flawed in a number of areas, including:

- The SBEIA lacks the transparency and analytical rigor necessary to support a credible cost analysis.
- Key data sources—particularly those related to labor and sampling costs—are either outdated or not cited, making it impossible to verify their accuracy or relevance.
- The report also inconsistently applies the definitions of "small business" and "small site," overlooking the fact that a single small business may operate multiple facilities and therefore face significantly higher cumulative compliance costs.
- Labor rates appear to be underestimated, and sampling costs are based on outdated 2018 pricing, despite the availability of more current data. Most notably, while effluent monitoring costs are included in Appendix A, they are excluded from the overall cost estimates and cost-per-employee calculations without explanation. This omission significantly understates actual compliance costs.
- Additionally, the assumptions in Appendix A are not clearly tied to specific permit
 requirements, making it difficult to determine which elements of the draft general permit
 were considered in the analysis. This lack of clarity prevents stakeholders from verifying
 the completeness or accuracy of the cost estimates, especially for new or revised permit
 obligations.

The Report concluded that "[t]aken together, these issues demonstrate that the SBEIA is not methodologically sound and lacks the necessary rigor to accurately estimate the true economic impact of the proposed, draft sand and gravel general permit." Exhibit A at 13-14.

B. The SBEIA's Legal Conclusions Are Inappropriate and Unsupported

In addition to the SBEIA's technical and methodological flaws outlined above, the SBEIA makes inappropriate and unsupported legal conclusions. The SBEIA is an economic analysis conducted by Mr. Shon Kraley, Ph.D. Mr. Kraley is not an attorney and unqualified to make any legal conclusions. Furthermore, the SBEIA is meant to be an economic analysis and not an analysis of whether substantive permit conditions are or are not authorized under the Clean Water Act.

Despite this, the SBEIA concludes, without any reasoning or support, that the permit's impact on facilities of any size is "difficult to legally and feasibly mitigate" and "more significant mitigation is not legal or feasibly possible without reducing the effectiveness of the permit." SBEIA at 10. Mr. Kraley provides no support for this statement, and does not point to any analysis in reaching this conclusion. The SBEIA simply states that Ecology used "various data sources, as appropriate, for this analysis." SBEIA at 6. Then, Ecology fails to identify what those data sources are, and why or how they are appropriate. This unsupported and inappropriate legal conclusion is even more troubling because the SBEIA, despite its numerous flaws, finds that the Draft SGGP would impose a burden on small businesses but that no mitigation is possible because of Mr. Kraley's legal conclusion.

This flaw is bolstered by the fact that Ecology admits that the SBEIA included absolutely <u>no</u> independent or external review. Instead, Ecology relied on "records of the best professional judgment of Ecology employees and other individuals." SBEIA at 6, 79. However, Ecology does not identify what that "professional judgment" entailed or what "records" are referred to. As described in the SBEIA Report (Exhibit A), these vague references are insufficient to support not only Ecology's analysis, but also its improper legal conclusions. Ecology must revise and update the SBEIA to correct these errors, including evaluation of real, meaningful mitigation for the disproportionate impacts on small businesses.

VI. Conclusion

WACA urges Ecology to reconsider and revise the Draft SGGP consistent with these comments in order to ensure that it remains a functional general permit that supports both environmental protection and operational viability. WACA stands ready to assist in this process and remains committed to supporting policies that balance environmental stewardship with economic sustainability.

Sincerely,

Michael L. Dunning

MLD:glg

cc: Cory Shaw, Executive Director, Washington Aggregates & Concrete Association (cshaw@warocks.org)

Jeff Killelea, Permit & Technical Services Section Manager, Department of Ecology (jeff.killelea@ecy.wa.gov)

Jon Kenning, Program Manager, Water Quality Program, Department of Ecology (jon.kenning@ecy.wa.gov)

Patrick Matsche, National Ready Mixed Concrete Association (pmatsche@nrmca.org)

Tiffany Reed Villarreal, National Ready Mixed Concrete Association (treedvillarreal@nrmca.org)

Dave Gent, Washington Asphalt Paving Association (WAPA) (<u>Dave.Gent@AsphaltWA.com</u>)

Kim Schofield, Washington Asphalt Paving Association (WAPA) (kim.schofield@asphaltwa.com)

Emily W. Coyner, National Stone, Sand & Gravel Association (ecoyner@nssga.org)

Ana Shafer, Washington Department of Natural Resources (ana.shafer@dnr.wa.gov)

Chris Christopher, Washington Department of Transportation (chris.christopher@wsdot.wa.gov)

EXHIBIT A



October 7, 2025

Ms. Cory Shaw, Executive Director Washington Aggregates & Concrete Association 22223 7th Ave South Des Moines, WA 98198

RE: Review of Department of Ecology's Small Business Economic Impact Analysis; Sand & Gravel Permit

Dear Ms. Shaw:

Crystal Waters Consulting, LLC (CWC) has reviewed the Small Business Economic Impact Analysis: Sand and Gravel Permit (SBEIA), prepared by Mr. Shon Kraley, Ph.D., for the Water Quality Program of the Washington State Department of Ecology (Ecology), dated August 2025. This letter provides background on the purpose of the SBEIA and the rationale for its preparation by Ecology. It also summarizes the key elements the SBEIA is required to address.

Following this background, the letter presents my analysis of the SBEIA. Based on this review, I have identified significant concerns with the report's methodology, particularly the cost calculation approach and the data sources used in developing the estimates. In my professional opinion, these methodological flaws result in a substantial understatement of the economic impact on small businesses. This, in turn, affects the adequacy of the selected mitigation measures and compromises the fair and effective implementation of the proposed Sand and Gravel General Permit. Furthermore, the report likely underestimates the economic impact on large businesses as well.

Background

The Washington State Department of Ecology recently issued proposed, draft changes to the Sand and Gravel General Permit. In accordance with Washington Administrative Code (WAC) 173-226-120, Ecology is required to assess whether the proposed permit changes would impose a disproportionate burden on small businesses by preparing a Small Business Economic Impact Analysis. If such a burden is identified, Ecology must take steps to mitigate it to the extent that is legal and feasible.

WAC 173-226-120 also requires the SBEIA to include the following elements:

- A brief description of the compliance requirements of the general permit.
- An estimate of the costs associated with complying with the permit, based on available data for the businesses expected to be covered, including:
 - Minimum technology-based treatment requirements as outlined in WAC 173-226-070
 - Monitoring requirements specified in the general permit

- o Reporting and recordkeeping requirements
- o Plan submittal requirements
- Equipment
- Supplies
- Labor
- Increased administrative costs

It is important to emphasize that cost estimates must be based on available data specific to the businesses expected to be covered under the permit. Additionally, the sources of this data must be clearly identified in accordance with RCW 34.05.272.

Under RCW 34.05.272(2)(a), before taking a significant agency action—including any Ecology rule implementing a regulatory determination under RCW 70A.350.040(1)(b) or (c)—Ecology is required to identify all sources of information it reviewed and relied upon during the rulemaking process. This includes peer-reviewed literature (if applicable), other scientific literature, and any additional sources used.

Furthermore, the Department must make available on its website an index of all records relied upon or cited in support of the proposed significant agency action.

In addition to clearly identifying data sources specific to the construction aggregates or sand and gravel industry, the methodology used to conduct the economic analysis must adhere to standard practices commonly accepted in economic studies. This includes clearly describing the type of economic analysis employed and explicitly stating the assumptions used to calculate the findings.

Throughout the remainder of this letter, CWC will address specific concerns with the SBEIA, including issues related to its methodology, data sources, cost estimates, and the lack of transparency in how those estimates are linked to the requirements outlined in the draft, proposed Sand and Gravel General Permit.

Methodology

Definition of a Small Business

In the SBEIA report, the cost analysis is presented by comparing small and large businesses. Initially, in Section 1.2, a small business is defined as "an independent entity with 50 or fewer employees." However, in Chapter 2, the analysis is structured around seven types of facilities, categorized by size and operational type and does not structure the analysis by the size of a business:

- 1. Small, inactive sand and gravel pit
- 2. Small, active sand and gravel pit
- 3. Large, active sand and gravel pit
- 4. Small, active sand and gravel pit with concrete and recycling
- 5. Large, active sand and gravel pit with concrete and recycling
- 6. Small, active hot-mix asphalt facility
- 7. Large, active hot-mix asphalt facility

In Appendix A, all cost estimates are based on the size of the facility rather than on business size as defined by the number of employees. The report estimates the cost per employee for these facility types using Table 3, page 19 (as shown in Figure 1 below). However, the text above this table appears to contain a typographical error, referring to it as Table 2. Moreover, while the narrative claims to evaluate small businesses, the calculations are actually based on facility size, not business structure.

This approach demonstrates Ecology's lack of knowledge regarding the industry it seeks to regulate. The approach fails to account for the reality that many small businesses in the sand and gravel, concrete and asphalt industry may own and operate multiple facilities. In these cases, employees are often shared across sites, meaning the cost per employee or per business cannot be accurately captured by analyzing each facility in isolation.

As a result, the methodology introduces inconsistencies and may significantly underestimate the actual burden on small businesses. For example, if a small business operates two or more facilities, the estimated cost could be effectively doubled or tripled, depending on how the report allocates costs. Additionally, the SBEIA also incorrectly accounts for the costs of large facilities by assuming employee counts (e.g., 27,167) apply to a single site, when in reality, the larger companies also own multiple locations.

Therefore, the SBEIA's approach does not provide a realistic or representative estimate of the sand and gravel, concrete, and asphalt industries' economic impact.

Table 2 lists the average number of employees for the small businesses (less than 50 employees) and the largest 10% of businesses in each of the representative industries.

Table 3: Average employment estimates by sector

Type of facility	Number of employees
Inactive small facility	2
Active small facilities in NAICS 21232X	10
Active largest ten percent of facilities in NAICS 21232X	1,633
Active small facilities in NAICS 32412X	7
Active largest ten percent of facilities in NAICS 32412X	1,460
Active small facilities in NAICS 3273XX	6
Active largest ten percent of facilities in NAICS 3273XX	27,167

⁴ Employment data for potentially impacted entities comes from Ecology's third-party database of employers with locations in Washington State.

Publication 25-10-061 Small Business Economic Impact Analysis Page 19 August 2025

Figure 1: Table 3 from SBEIA Report

Data Sources

As discussed earlier, RCW 34.05.272 requires the SBEIA to clearly identify all sources of information relied upon and to maintain a public record of these sources. Table 3 (shown in Figure 1 above) of the SBEIA highlights a key example where this requirement is not met. Reference number 4 notes that "employment data for potentially impacted entities comes from Ecology's third-party database of employers with locations in Washington State." However, this "third-party" database is neither cited in detail nor included in the report's appendices, preventing any independent verification of the data's accuracy or relevance to the sand and gravel industry.

This lack of transparency is not isolated to Table 3 but is consistent throughout the report. Many references are vague or point to sources that are not publicly accessible, making it impossible to replicate or verify the findings. Although the report includes a list of references on page 69, it does not include critical underlying data or documentation to support key assumptions and estimates. The SEBIA thus does not meet the requirements of RCW 34.05.272.

Notably, the report does not appear to have undergone an independent or external peer review, nor does it indicate that Ecology sought input from stakeholders within the sand and gravel industry during the development of the analysis. This lack of industry engagement and external validation undermines the credibility and completeness of the economic impact assessment, particularly where the SBEIA demonstrates Ecology's lack of knowledge regarding the industry.

Within the "Independent Data" section of the report, several sources are listed. However, significant issues were identified with these sources, as outlined below.

- Everett Environmental Laboratory (2020). 2018 Everett Environmental Laboratory Price List.
 - This references an outdated price list.
- Permit and Reporting Information System (PARIS) (2025). Ecology database.
 http://www.ecy.wa.gov/PROgrams/wq/permits/paris/index.html
 - The Link provided is broken and does not provide the information used in the report.
- US Bureau of Labor Statistics (2024). May 2024 State Occupational Employment and Wage Estimates for Washington. https://www.bls.gov/oes/current/oes-wa.htm
 - The Link provided does not go to the wage rates used and the report fails to identify those labor positions within the analysis that would likely require the use of a Prevailing Wage Rate. This issue will be explored in more detail later in this letter.
- Records of the best professional judgment of Ecology employees or other individuals.
 - It is unclear what this means, what Ecology employees are referred to, what relevant knowledge or expertise that those employees may have, what records are being referred to or where they were used in the report.

Cost Data Issues

Within Appendix A of the SBEIA report, multiple tables are presented for each of the evaluated facility types, listing unit costs for various line items. However, none of these unit costs are directly referenced or sourced, making it impossible to verify their origin or understand the assumptions used in their calculation.

While the report mentions wage data from the Bureau of Labor Statistics (BLS), the provided link does not lead to a specific table or dataset that includes the actual wage values used in the analysis. As a result, it remains unclear how the reported labor costs were derived.

Table 1 below summarizes commonly used line items from Appendix A across all facility types, with the columns shaded in gray reflecting data taken directly from the SBEIA. It appears that

the unit cost for labor (Ref # 1) was based on private sector wage rates. This is one of the few line items where the nature of the cost (i.e., labor) is clearly identifiable. However, the analysis appears to either incorrectly apply a private-sector wage rate or fails to account for the fact that many operations in the sand and gravel, concrete, and asphalt industries are unionized or subject to prevailing wage requirements because many of the industry's customers are public entities subject to those requirements.¹

According to the Washington State Department of Labor and Industries, the prevailing wage for a laborer is \$46.742 per hour. This wage rate is more appropriate because it reflects prevailing wage rates, which Washington sand and gravel businesses must routinely pay. If this rate had been used in the cost analysis, the unit cost for labor would be significantly higher than what is presented in the report, altering the overall cost estimates, potentially substantially.

While the "Supervision" (Ref # 2) line item is also assumed to be associated with labor costs, it is reasonable to conclude that this position would be compensated at a private-sector wage rate, rather than prevailing wage. However, even in this case, the wage rate used in the SBEIA appears to be inaccurate. According to the BLS, the mean hourly wage for a Supervisor in the Construction Trades and Extraction sector in Washington State (SOC code 47-1011) is \$53.84.3 In contrast, the SBEIA lists the Supervisor's hourly wage as \$31, a figure that significantly underestimates the actual market wage for this position. Further, the SBEIA does not reference a Standard Occupational Classification (SOC) code that would link the data to a specific occupation and corresponding wage rate within the BLS database. As a result, the validity of the SBEIA's cost analysis is further undermined, as the source and accuracy of the wage rates used cannot be independently verified.

In Table 1, References #3 and #4 list a Grader and a Front-End Loader, each with a unit cost of \$39 per hour; again, these rates originate from the SBEIA Appendix A. However, it is unclear whether this hourly rate includes both the cost of owning or renting the equipment and the labor required to operate it. Standard practice in economic cost analysis is to separate these two components: equipment costs and labor costs for the equipment operator.

For heavy equipment, it is customary to apply a prevailing wage rate for the operator, as many facilities in the sand and gravel, concrete, and asphalt industries are unionized or otherwise subject to prevailing wage requirements. According to the Washington State Department of Labor and Industries, the prevailing wage for a Heavy Equipment Operating Engineer is \$67.26 per hour.⁴

This labor cost would be in addition to the cost of renting or owning the equipment itself. Therefore, the \$39/hour unit cost listed in the SBEIA appears to significantly underestimate the true cost. It is unclear whether the report omitted the labor cost, the equipment cost, or both—calling into question the accuracy and completeness of the cost estimates provided.

¹ https://teamsters174.net/building-materials-construction/

² https://secure.lni.wa.gov/wagelookup/rates/apprentice-rates

³ First Line Supervisor from Construction for Construction Trades and Extraction Workers. <u>www.bls.gov/oes.</u> Washington. OES_Databook_2025 for Washington.

⁴ https://secure.lni.wa.gov/wagelookup/rates/apprentice-rates - "Construction Equipment Operator"

Table 1: Unit Cost Analysis

Ref #	Item	Unit	Unit Cost	Other Sources
1	Labor	Hours	\$31	\$46.74
2	Supervision	Hours	\$35	\$53.84
3	Grader (heavy equipment)	Hours	\$39	\$67.26
4	Front-End Loader (heavy equipment)	Hours	\$39	\$67.26

Throughout the tables in Appendix A of the SBEIA, there are no citations identifying labor rates for Operating Engineers or equipment operators responsible for running heavy equipment or smaller vehicles such as water trucks, support vehicles, or mowers. As a result, it is unclear whether the unit costs provided for these items include labor or only represent equipment costs.

Moreover, the report does not explain how any of the unit costs were derived, nor does it clarify whether labor is included in cases where the line item references equipment. This lack of transparency raises serious concerns about the accuracy and completeness of the cost estimates. If labor is not included for operating or using the equipment, the reported figures significantly understate the true cost of complying with the permit requirements.

Without clear sources, the figures in Appendix A cannot be verified, reviewed, or cross-referenced—making it impossible to assess whether the estimates accurately reflect real-world conditions or industry standards. This compounds the lack of transparency noted above.

Effluent Monitoring Costs

Within the SBEIA Appendix A, each facility has a table associated with Compliance Costs and a separate table associated with Effluent Monitoring Costs. Table 2 below summarizes the total Compliance and Effluent Monitoring Costs for each facility evaluated in the SBEIA.

Table 2: Total Compliance & Effluent Monitoring Costs Per Facility Type from SBEIA Appendix A

Facility Type	New	Existing
Small, Inactive Sand & Gravel Pit		
-Compliance Costs	\$2,909	\$2,565
-Effluent Monitoring Costs	No Data Provided	No Data Provided
Total Small Inactive Sand & Gravel Pit	\$2,909	\$2,565
Small, Active Sand & Gravel Pit		
-Compliance Costs	\$74,812	\$32,456
-Effluent Monitoring Costs	\$18,962	\$18,962
Total Small Active Sand & Gravel Pit	\$93,774	\$51,418
Large, Active Sand & Gravel Pit		
-Compliance Costs	\$127,288	\$66,391
-Effluent Monitoring Costs	\$39,810	\$39,810
Total Large Active Sand & Gravel Pit	\$167,098	\$106,201
Small, Active Sand & Gravel Pit with Concrete & Recycling		
-Compliance Costs	\$133,525	\$81,247
-Effluent Monitoring Costs	\$81,365	\$81,365
Total Small Active Sand & Gravel Pit w/Concrete & Recycle	\$214,890	\$162,612
Large, Active Sand & Gravel Pit with Concrete & Recycling		
-Compliance Costs	\$216,692	\$132,330
-Effluent Monitoring Costs	\$81,884	\$81,884
Total Large Active Sand & Gravel Pit w/Concrete & Recycling	\$298,576	\$214,214
Small, Active Hot Mix Asphalt Facility		
-Compliance Costs	\$35,815	\$19,722
-Effluent Monitoring Costs	\$30,424	\$30,424
Total Small Active Hot Mix Asphalt Facility	\$66,339	\$50,146
Large, Active Hot Mix Asphalt Facility		
-Compliance Costs	\$74,639	\$43,756
-Effluent Monitoring Costs	\$30,282	\$30,282
Total Large Active Hot Mix Asphalt Facility	\$104,921	\$74,038

On page 18 of the SBEIA, and as shown in Figure 2 below, compliance costs are presented by facility in thousands of dollars. However, these figures do not include the Effluent Monitoring Costs detailed in Appendix A and summarized in Table 2 above. For example, according to Figure 2 below (which reflects Table 2 in the SBEIA report), the compliance cost for an existing small, active sand and gravel pit is listed as \$32,000. In contrast, Table 2 above shows a total compliance cost of \$32,456 and effluent monitoring costs of \$18,962—bringing the actual total to \$51,418. These values are taken directly from Appendix A of the SBEIA. By omitting these costs—and without providing an explanation for their exclusion—it is not possible to determine whether the economic comparisons are valid. This omission further undermines the overall credibility of the report and its ability to accurately estimate the true cost of implementing the proposed draft general permit.

The SBEIA report does not explain why only compliance costs were included in the analysis, and why effluent monitoring costs, despite their presence in Appendix A and despite such costs being compliance costs (because such monitoring is required for permit compliance) were

excluded. If effluent monitoring costs were not intended to be part of the total cost analysis, their inclusion in Appendix A is unclear. If, on the other hand, such costs were inadvertently included in Appendix A, those costs should be included because they are costs of compliance. This omission, whether intentional or not, results in a significant underestimation of total compliance costs and raises concerns about the transparency, consistency and validity of the report's methodology.

Table 2: Summary of annual equivalent compliance costs

Facility Type	Estimated Compliance Cost (thousands of \$) New	Estimated Compliance Cost (thousands of \$) Existing
Small, inactive sand and gravel pit	\$3	\$3
Small, active sand and gravel pit	\$75	\$32
Large, active sand and gravel pit	\$127	\$66
Small, active sand and gravel pit with concrete and recycling	\$134	\$81
Large, active sand and gravel pit with concrete and recycling	\$217	\$132
Small, active hot-mix asphalt facility	\$36	\$20
Large, active hot-mix asphalt facility	\$75	\$44

Publication 25-10-061 Page 18 Small Business Economic Impact Analysis August 2025

Figure 2: SBEIA Compliance Costs

On page 19 of the SBEIA, the estimated number of employees used to calculate the cost per employee is included in the table titled 'Average Employment Estimates by Sector'. However, as on page 20 of the SBEIA (shown in Figure 3 below), the cost per employee is derived solely from compliance costs, excluding the effluent monitoring costs also presented in Appendix A. This is clearly illustrated in Table 3 below, where the calculated cost per employee used in the SBEIA only accounted for compliance and did not consider the effluent monitoring costs. (the cells highlighted in yellow in Table 3 match Table 4 in Figure 3 below from the SBEIA report). As mentioned above, there is no explanation why effluent monitoring costs were excluded, as they are clearly compliance costs.

Table 4: Relative costs of compliance

Facility Type	NAICS	Compliance Cost per Employee (dollars): New	Compliance Cost per Employee (dollars): Existing
Small, inactive sand and gravel pit	21232	\$1,455	\$1,283
Small, active sand and gravel pit	21232	\$7,481	\$3,246
Large, active sand and gravel pit	21232	\$78	\$41
Small, active sand and gravel pit with concrete and recycling	3273	\$22,254	\$13,541
Large, active sand and gravel pit with concrete and recycling	3273	\$8	\$5
Small, active hot-mix asphalt facility	32412X	\$5,116	\$2,817
Large, active hot-mix asphalt facility	32412X	\$51	\$30

Figure 3: SBEIA Estimated Compliance Costs per Employee

Table 3: Evaluati	on of the Cost P	er Employee Es	stimated in the SBEI	Α
Facility Type	Total Facility Cost New	Total Facility Cost Existing	Cost/Employee New	Cost/Employee Existing
Small, Inactive Sand & Gravel Pit	Est. No. of Employees ⁵ (2)			
-Compliance Costs	\$2,909	\$2,565	\$1,455	\$1,283
-Effluent Monitoring Costs	No Data Provided	No Data Provided		
Total Small Inactive Sand & Gravel Pit	\$2,909	\$2,565	\$1,455	\$3,246
Small, Active Sand & Gravel Pit	Est. No. of Employees (10)			
-Compliance Costs	\$74,812	\$32,456	\$7,481	\$3,246
-Effluent Monitoring Costs	\$18,962	\$18,962		
Total Small Active Sand & Gravel Pit	\$93,774	\$51,418	\$9,377	\$5,142
Large, Active Sand & Gravel Pit	Est. No. of Employees (1,633)			
-Compliance Costs	\$127,288	\$66,391	\$77.95	\$40.66
-Effluent Monitoring Costs	\$39,810	\$39,810		
Total Large Active Sand & Gravel Pit	\$167,098	\$106,201	\$102.33	\$65.03
Small, Active Sand & Gravel Pit with Concrete & Recycling	Est. No. of Employees (6)			
-Compliance Costs	\$133,525	\$81,247	\$22,254	\$13,541
-Effluent Monitoring Costs	\$81,365	\$81,365		
Total Small Active Sand & Gravel Pit w/Concrete & Recycle	\$214,890	\$162,612	\$35,815	\$27,102
Large, Active Sand & Gravel Pit with Concrete & Recycling	Est. No. of Employees (27,167))
-Compliance Costs	\$216,692	\$132,330	\$7.98	\$4.87
-Effluent Monitoring Costs	\$81,884	\$81,884		
Total Large Active Sand & Gravel Pit w/Concrete & Recycling	\$298,576	\$214,214	\$10.99	\$7.89
Small, Active Hot Mix Asphalt Facility	Est. No. of Employees (7)			
-Compliance Costs	\$35,815	\$19,722	\$5,116	\$2,817
-Effluent Monitoring Costs	\$30,424	\$30,424		
Total Small Active Hot Mix Asphalt Facility	\$66,339	\$50,146	\$9,463	\$7,164
Large, Active Hot Mix Asphalt Facility		Est. No. of	Employees (1,460)	
-Compliance Costs	\$74,639	\$43,756	\$51.12	\$29.97
-Effluent Monitoring Costs	\$30,282	\$30,282		
Total Large Active Hot Mix Asphalt Facility	\$104,921	\$74,038	\$71.86	\$50.71

 $^{^{\}rm 5}$ Estimated Number of Employees is from Table 3, page 19 of the SBEIA report.

Effluent Sampling and Labor Costs

A review of the effluent monitoring costs in the SBEIA reveals discrepancies in both the cost per test and the labor rates for sampling. In Appendix A, the estimated cost per test is \$16.50, and the sampling labor rate is listed as \$30.66 per hour. However, the SBEIA references a 2018 Everett Environmental Laboratory price list, which is significantly outdated. The attached 2025 Everett Environmental Laboratory Price List, effective February 1, 2025, provides updated pricing: pH and turbidity tests are listed at \$21 each, while Total Dissolved Solids (TDS) and Total Suspended Solids (TSS) tests are priced at \$41 and \$35, respectively—substantially higher than the \$16.50 figure used in the report. The SBEIA provides no explanation why it relied on the 2018 price list when the 2025 price list from the same laboratory is readily available.

In addition, the SBEIA's labor cost estimate of \$30.66 per hour makes the same underestimation error discussed above. According to the 2025 Washington State Prevailing Wage Rates, the hourly rate for a landscape maintenance construction worker—a classification likely to be responsible for sample collection—is \$46.74. The SBEIA does not cite a source for its labor cost figure, making it impossible to verify whether the rate is accurate or relevant to workers in the sand and gravel, concrete, or asphalt industries.

These errors and inconsistencies call into question the accuracy and reliability of the effluent monitoring cost estimates used in the SBEIA's overall cost analysis.

Permit Compliance Cost Issues

To verify that the cost estimates in Appendix A of the SBEIA accurately reflect the full range of both existing and new requirements outlined in the General Permit, the estimates would need to reference specific sections of the permit. However, this cross-referencing was not provided. While Appendix A includes a list of assumed actions for each facility type, these actions are not linked back to the permit language, making it difficult to determine whether all relevant requirements—particularly new or revised ones—have been accounted for in each scenario.

The SBEIA lacks transparency regarding which specific provisions of the draft general permit were included in the cost analysis, making it unclear whether costs associated with new requirements were considered. Without clearly identifying the permit sections evaluated, it is not possible to assess the completeness or accuracy of the underlying cost assumptions. Based on our detailed review, it appears that several newly proposed requirements were excluded from the analysis. This likely results in a significant underestimation of the actual cost of compliance, particularly when compared to the current permit framework.

The omission of these new requirements represents a critical flaw in the SBEIA. The fundamental purpose of the SBEIA is to evaluate the economic impact of regulatory changes on small businesses. By failing to include all newly imposed obligations, the report does not fully assess those impacts. This further highlights deficiencies in the analysis and reinforces the conclusion that the report does not adequately capture the true economic burden of the proposed draft permit.

Although the permit comment period did not provide sufficient time to assess whether all new requirements in the Draft General Permit were included, we identified the following list of new

requirements within the Draft General Permit that do not appear to be reflected in any of the costs in Appendix A.

1. Reporting

- a. Annual Report Permit Condition S10.G
 - None of the scenarios contained in Appendix A of the SBEIA report reference costs for preparing an Annual Report.

2. Special Conditions

- a. S3.D.c Lined Impoundment Requirements Impermeable Liner to include:
 - i. Synthetic membrane material, hardened concrete or hardened asphalt.
 - Appendix A includes a lined impoundment assuming the use of concrete for the new small and large active sand and gravel pits. However, no other facility type includes a cost for lining an impoundment.
 - 2. The lined impoundment cost estimate used for the new small and large sand and gravel with concrete and recycling facilities was \$4,747. However, no citation or reference was provided that would allow for the verification of how this cost was estimated. Nor was this a cost included in any of the other scenarios.

b. S3.E. – all new facilities require a Chemical Use Plan.

 The cost of developing a Chemical Use Plan for the new facility options was not listed in Appendix A of the SBEIA report.

c. S8

- i. S8.B.2. Impermeable Surfaces to be paved with concrete, asphalt, or synthetic membrane.
- ii. S8.E.9 Impermeable Surfaces,
- iii. **\$8.F.3.b** impervious surfaces where recycle concrete is stored must be lined.
 - 1. The revised permit requires certain impermeable surfaces to be paved or lined with a synthetic membrane; however, the SBEIA appears to estimate costs for hydromulching exposed surfaces instead. It is unclear which specific permit section the SBEIA assumes the hydromulching is intended to comply with. Whether it is intended to address requirements under Sections S8.B.2, S8.E.9, or S8.F.3.b, hydromulching does not appear to be the most suitable best management practice (BMP) for these scenarios. If paving with concrete, or asphalt is required to meet permit conditions, as the language suggests, none of the scenarios presented in Appendix A account for this more costly and labor-intensive requirement. This raises concerns that the SBEIA underestimates compliance costs by substituting an incorrect BMP or excluding it all together.

2. Additionally, for existing facilities to comply with Section S8.F.3.b, it would be necessary to relocate existing recycle material piles, pave the areas where they are stored, and then return the materials to the newly paved surfaces. The estimated costs associated with these activities are not included in the SBEIA report. As a result, the cost estimates provided do not accurately reflect the full cost of implementing the proposed general permit.

Conclusion

The SBEIA lacks the transparency and analytical rigor necessary to support a credible cost analysis. Key data sources—particularly those related to labor and sampling costs—are either outdated or not cited, making it impossible to verify their accuracy or relevance. The report also inconsistently applies the definitions of "small business" and "small site," overlooking the fact that a single small business may operate multiple facilities and therefore face significantly higher cumulative compliance costs.

Labor rates appear to be underestimated, and sampling costs are based on outdated 2018 pricing, despite the availability of more current data. Most notably, while effluent monitoring costs are included in Appendix A, they are excluded from the overall cost estimates and cost-per-employee calculations without explanation. This omission significantly understates actual compliance costs.

Additionally, the assumptions in Appendix A are not clearly tied to specific permit requirements, making it difficult to determine which elements of the draft general permit were considered in the analysis. This lack of clarity prevents stakeholders from verifying the completeness or accuracy of the cost estimates, especially for new or revised permit obligations.

Taken together, these issues demonstrate that the SBEIA is not methodologically sound and lacks the necessary rigor to accurately estimate the true economic impact of the proposed, draft sand and gravel general permit.

Sincerely

Crystal Howard, Founder

Attachments

Qualifications of the Author

Crystal Howard is the founder of Crystal Waters Consulting, LLC, and has a Master's Degree in Natural Resource Economics from Purdue University and mineral valuation training from the Colorado School of Mines. Ms. Howard has 20 years of experience performing economic and mineral valuation services in the form of producing construction aggregate market studies, forecasts, economic impact reports, mineral royalty evaluations, and expert witness testimony. Additionally, Ms. Howard has also developed a forecasting model that accurately estimates construction aggregate, concrete, and asphalt demand by region and state.