	Table 1 : Comments on the Solid Waste Handling Standards proposed rule		
#	Proposed Rule Section	Comment	
1	173-350-100, Contaminated Soil	All methods for establishing a cleanup level under MTCA require a terrestrial ecological evaluation for contaminated soils ¹ . Therefore, it is unclear what standards are applied by part (a) of the definition without a predetermination that soils are or are not contaminated. For example to determine what MTCA cleanup level to use for the subsequent determination if a soil is clean or contaminated, you would first need to know if the soil is clean or contaminated to see if a terrestrial ecological evaluation is required at the end site location. Ecology should clarify what standards the agency intends to apply to determine if soils are clean versus contaminated.	
2	173-350-100, Contaminated Soil	The effect of the Contaminated Soil definition is that the end disposal site for a material must be known at the time the soil is excavated for any materials where a release has occurred in order to determine the Cleanup level under MTCA for part (a) of both the Clean and Contaminated Soil definition. It is unclear what soils from the built environment could be accepted by a soil recycler under the proposed rule because all these materials would have been subject to a release (if the term "release" includes routine vehicle operations per coordination with Ecology staff) and it is unknown what the end disposal site is at the time the recycler accepts it.	
		This may reduce the ability of materials recyclers to accept soil from the built environment which would result in impacts to agencies that manage transportation infrastructure and the overall re-use of road materials consistent with the priorities of the state to encourage recycling above disposal. ²	
3	173-350-100, Contaminated Soil and Clean Soil	The effect of the Clean and Contaminated Soil definition is that all materials that have been subject to a release would undergo testing as though the soil had come from a MTCA site (part a of the proposed rule definitions) and an unassociated site would undergo a scoping process ³ under MTCA. Based on the examples provided by Ecology as well as feedback from Ecology staff during phone conversations and the public hearing on 3/6/2018: materials maybe considered as having been subject to a release based on their underlying characteristics (not associated with a release, i.e. engineered soil) as well as releases that would commonly be considered de minimis (i.e. routine vehicle operation). The result would be that all materials associated with transportation infrastructure and the built environment (not just street wastes) will be treated as though they are from a MTCA site and disposal or reuse sites would undergo a MTCA scoping process. The Forum respectfully requests that Ecology seek an opinion from the	

¹ 173-340-700 WAC ² RCW 70.95.010 paraphrased ³ WAC 173-340-700(5)

#	Proposed Rule Section	ts on the Solid Waste Handling Standards proposed rule Comment
	Troposcu nare section	Attorney General to ensure that Ecology is within its scope of authority to regulate soils in this way under RCW 70.95.
4	173-350-100, Contaminated Soil With reference to the existing WAC 173-350 and WAC 173-340	The current definition of contaminated soils: "means soils removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean-up activities and which contain harmful substances but are not designated dangerous wastes" is consistent with MTCA. The definition of contaminated soils in the proposed rule represents a change that will result in costs above the baseline of the Preliminary Regulatory Analysis ⁴ . Therefore Ecology must fully consider the impact of regulating these soils.
5	173-350-100, Contaminated Soil With reference to SEPA Environmental Checklist, WAC 173- 340, Preliminary Regulatory Analysis	In supporting materials to the proposed rule Ecology has stipulated that changes to the definition "require operators to ascertain they will not create a MTCA cleanup site by the placement of contaminated soils at any particular location" ⁵ , however the proposed rule does not reflect a requirement not to create a MTCA site which would correspond to the definition of hazardous substance ⁶ and not cleanup levels. Examples of types of hazardous substance releases that are regulated by MTCA include but are not limited to: "(v) Any contaminated soil or unpermitted disposal of waste materials that would be classified as a hazardous waste under federal or state law. (vi) Any abandoned containers such as drums or tanks, above ground or buried, still containing more than trace residuals of hazardous substances. (vii) Sites where unpermitted industrial waste disposal has occurred ⁷ ." The proposed rule regulates soils at a far lower threshold then what is required to designate a MTCA site. Furthermore in the Preliminary Regulatory Analysis Ecology identifies that for the purposes of management, contaminated soils and dredged materials are: "materials that are not clean enough to be placed on the land freely (for example as topsoil or quality fill), but that aren't contaminated to the point of being hazardous waste or requiring cleanup under the state Model Toxics Control Act." ⁸ The Forum interprets this statement to mean that Ecology intends for the proposed rule to regulate soils that are not otherwise regulated under MTCA and at levels lower than hazardous substances required to designate a MTCA site.

 ⁴ Preliminary Regulatory Analysis, Publication no. 18-07-002, pg. 23
 ⁵ SEPA Environmental Checklist, Page 20 of 23
 ⁶ 173-340-200 WAC
 ⁷ 173-340-300 WAC
 ⁸ Preliminary Regulatory Analysis, Publication no. 18-07-002, pg. 61

	Table 1 : Comments on the Solid Waste Handling Standards proposed rule		
#	Proposed Rule Section	Comment	
		The content of the proposed rule and the explanation provided by Ecology in the Preliminary Regulatory analysis represent a change in the scope of materials that are currently regulated, not a clarification. Ecology must fully consider the impact of regulating these materials within the Preliminary Regulatory Analysis, SEPA and costs associated with implementing the National Pollution Discharge Elimination System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.	
6	173-350-100, Contaminated Soil, petroleum contaminated soils, release and street waste With reference to Appendix IV-G of the 2012 Stormwater Management Manual for Western Washington, as amended in December 2014 and the Phase 1 General Municipal Stormwater Permit	The contaminated soil definition is unclear because of the examples Ecology provides. Street waste is identified by Ecology in the current 2012 Stormwater Management Manual for Western Washington, as amended in December 2014, as clean soil under the current Solid Waste Handling Standards: "There are no specific references for reuse and disposal options for street waste in the Solid Waste Handling Standards because they do not apply to clean soils", however street waste is provided as an example of contaminated soil in the proposed rule. The Forum feels that street waste generated through routine maintenance does not meet the proposed definition of contaminated soil because a release has not occurred; under the proposed rule routine operations of vehicles would not constitute a release in relation to petroleum contaminated soils. The Forum also notes that discharges to the municipal separate storm sewer system are currently addressed by the municipalities the Municipal Stormwater Permit. Ecology should eliminate the example of street waste from the definition of contaminated soil.	
7	173-350-020 and 173- 350-100, Engineered Soil	The proposed rule does not apply to reused engineered soil when used for the same engineering properties in another construction site (ref. proposed rule 173-350-020). However engineered soil is also identified as an example of a contaminated soil which is regulated when moved from one location to another for placement on the ground (ref. proposed rule 173-350-100). It is unclear why engineered soil is included as an example unless Ecology considers the process used to create an engineered soil to constitute a release. Ecology should eliminate the example of engineered soil from the definition of contaminated soil because engineered soil are no more subject to a release then other materials. Is Ecology using the underlying pH of engineered soil to qualify these soils as contaminated, without a release from another source?	

⁹ 2012 Stormwater Management Manual for Western Washington, as Amended in December 2014, Publication number 14-10-055, Appendix IV-G Recommendations for Management of Street Wastes, Page G-2 ¹⁰ Proposed Rule, definition of "Petroleum contaminated soil" and "Release"

	Table 1 : Comments on the Solid Waste Handling Standards proposed rule		
#	Proposed Rule Section	Comment	
		If Ecology is seeking to classify engineered soil as contaminated soil then Ecology should also consider the impacts of that change including the reduction in reuse of engineered soil, and thereby increased disposal. The proposed rule would work against Washington Statute (70.95 RCW) which generally prioritizes recycling above disposal, ¹¹ and specifically requires the department of transportation and certain government entities to reuse construction aggregate and recycled concrete (effective 1 January 2016) ¹² .	
		The impact of this change may be significant if it changes the way materials from the demolition of the Alaskan Way Viaduct is handled based on the more restrictive pH standard in the proposed rule. This impact should be evaluated in the SEPA documentation as well as Preliminary Regulatory Analysis for demolition of all concrete based transportation infrastructure.	
8	173-350-100, contaminated soil	Ecology recently released a publication "Guidance for Remediation of Petroleum Contaminated Sites" which includes a section on reuse of Petroleum Contaminated Soils. This guidance sets standards and allows for flexibility of re-used petroleum contaminated soils that do not rely on a site specific MTCA evaluation required by the proposed rule. Ecology should allow for to use of either the standard set by Guidance 10-09-057 or the proposed rule to be used in determining re-use options for Petroleum Contaminated Soils. As Ecology notes in the guidelines "Soils managed consistently with these guidelines will most likely be protective of human health and the environment based on Ecology's past experience." ¹³	
9	173-350-100, contaminated soil	Ecology should revise the example "and soil likely to have contaminants from industrial or historical activities" to "and soil likely to have contaminants from a release associated with industrial or historical activities" in order to be consistent with the first sentence of the definition.	
10	173-350-100, Release	The proposed rule creates a change in scope of materials regulated by including a definition of "Release" that is far more restrictive then the definition of a release established under MTCA. Under MTCA: ""Release" means any intentional or unintentional entry of any https://doi.org/10.1001/journal.org/ into the environment, including but not limited to the abandonment or disposal of containers of https://doi.org/10.1001/journal.org/	

¹¹ RCW 70.95.010 paraphrased
12 RCW 70.95.805 paraphrased
13 Guidance for Remediation of Petroleum Contaminated Sites, Toxics Cleanup Program, Publication No. 10-09-057 (Revised June 2016)

	Table 1 : Comments on the Solid Waste Handling Standards proposed rule		
#	Proposed Rule Section	Comment substances 14" (underline added). Under the proposed rule "Release" is a new definition and means: "any intentional or unintentional entry of a contaminant into the environment at more than de minimis amounts and includes, but is not limited to, spilling, leaking, pouring, emitting, emptying, discharging, adding, applying, amending, injecting, pumping, escaping, leaching, dumping, or disposing of any contaminant" (underline added). The content of the proposed rule represent a change in the scope of materials that are currently regulated, not a clarification. Ecology must fully consider the impact of regulating these materials within	
		the Preliminary Regulatory Analysis, SEPA and costs associated with implementing the National Pollution Discharge Elimination System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.	
10	173-350-100, Contaminated Soil, petroleum contaminated soils, release and street waste	In phone conversations Ecology staff and during the question and answer session of the public hear on 3/6/2018, Marni Solheim indicated that the proposed rule regulates street waste because street waste has an assumption of having been subject to a release. If this is the case, the effect of the term "de minimis" in the definition of release is rendered meaningless. Ecology has identified that routine vehicle operations can be considered a release.	
		If routine vehicle operations are considered to be a release then all materials associated with transportation infrastructure would likely be subject to testing under the proposed rule (not just street wastes). Ecology has noted in its response to comments on the Preliminary Draft: "Ecology feels if there have been releases of contaminants to the removed material; it needs to be assessed to decide appropriate use or disposal options. Other sections of the rule (e.g. pile storage) allow temporary storage at an intermediate location under specific timeframes without invoking permitting or other standards. This allows time to test these soils to assess appropriate final placement" (underline added). The Forum has also determined that under the proposed rule testing would likely be required because only test-driven parameters are provided in the proposed rule for soils where a release has occurred. This would result in significant costs for many materials that would not meet requirements for contaminated soil under existing standards or the proposed rule.	

¹⁴ WAC 173-340-200

	Table 1 : Comments on the Solid Waste Handling Standards proposed rule		
#	Proposed Rule Section	Comment	
		Ecology should include the impacts of all testing associated with the proposed rule in the Preliminary Regulatory Analysis, SEPA and costs associated with implementing the National Pollution Discharge Elimination System, Municipal Stormwater Permits. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.	
12	173-350-100, Contaminated Soil, street waste	"Street waste" means solid or dewatered materials collected from stormwater catch basins and similar stormwater treatment and conveyance structures, and materials collected during street and parking lot sweeping.	
		Ecology should delete "and similar stormwater treatment and conveyance structures" from the definition of street waste. The term "conveyance structure" includes the municipal separate storm sewer system which would result in most soils associated with the transportation infrastructure being labeled "street waste" and subject those soils to testing. Conveyance structures includes ditches, streets, curbs, gutters, man-made channels, stormwater drainage systems and pipes which are not terms that should be associated with street waste. This would also include detention/retention ponds and bioswales. Ecology has stated that there is "limited information on the characteristics of waste from detention/retention ponds, bioswales, and similar stormwater treatment facilities." ¹⁶	
		According to Chapter 70.95 RCW, street waste is defined as solid waste. If materials removed from conveyance structures are classified as solid waste, local agencies could see 3-4 times the amount of material regulated as solid waste. Ecology should consider the costs of testing these materials under the proposed rule that are unknown or unlikely to trigger regulation as a contaminated soil. The proposed rule would also require new locations with solid waste handling facilities and staff to manage them. There is no mention in the cost benefit analysis of how this could impact local agencies who maintain conveyance structures. These impacts may include but are not limited to costs associated with: additional permits, structural improvements, testing, record	

Phase 1 Municipal Stormwater Permit, Issuance Date: August 1, 2012, Modification Date: January 16, 2015,
 Definition of Municipal Separate Storm Sewer System, pg. 74 of 77
 2012 Stormwater Management Manual for Western Washington, as Amended in December 2014, Publication number 14-10-055, Appendix IV-G Recommendations for Management of Street Wastes, Page G-1

	Table 1 : Comments on the Solid Waste Handling Standards proposed rule		
#	Proposed Rule Section	Comment	
		keeping, staff to determine cleanup levels, staff and equipment to manage soils, and cost of contaminated soil disposal.	
		Please also note that under the proposed rule labeling these materials "street wastes" will preclude re-use as fill or alternative daily cover at landfills unless a test is performed and the soils are determined not to meet a MTCA standard. This rule will result in costs to many local agencies who reuse these wastes as alternative daily cover. These costs must also be considered in the cost benefit analysis.	
13	173-350-100, Contaminated Soil With reference to RCW 70.95	The state has prioritized the recycling and reuse of material above disposal. ¹⁷ It is unclear what, if any, project proponent would undergo the scoping evaluations required by MTCA to establish cleanup levels for recycled fill materials to be used on a development site. A MTCA scoping evaluation would be required to set cleanup levels under the proposed definition of both clean and contaminated soils taking into account the ecological sensitivity and pathways to receptors of that site. Ecology should consider that the result of the proposed rule may be the reduction in use of recycled aggregate materials, and thereby increased disposal and mining of new fill material. The proposed rule may work against the goals of the State Statute (RCW 70.95).	
14	173-350-100, Contaminated Soil and 173-350-320	Ecology should include a null hypothesis that soil and dredged material from regular maintenance of transportation infrastructure is considered clean unless a release of a hazardous substance has occurred. This would reduce the number of sites requiring a piles permit under the proposed rule as well as resolve some of the concerns related to the definition of contaminated soils part (a). This would eliminate requirements under 173-340-700 for presumed to be contaminated soil at potential disposal sites (i.e. a terrestrial ecological evaluation).	
15	173-350-320 Preliminary Regulatory Analysis, page xi, 3 and 10	Table 320-A Terms and Conditions for Solid Waste Permit Exemptions includes and exemption for the temporary storage of contaminated soil. There are no provisions identified in the proposed rule that would prevent the infrequent re-use of a site multiple times for temporary contaminated materials storage as long as each time the site is used that all contaminated soils are removed from the site within 90 day. However the terms "does not recur" is included within the preliminary regulatory analysis on multiple pages (xi, 3 and 10) in reference to this exemption. Ecology should amend the Preliminary Regulatory analysis to reflect the proposed rule; or include the costs of permitting storage sites used infrequently to store contaminated soils.	

¹⁷ RCW 70.95.010 paraphrased

	Table 1 : Comments on the Solid Waste Handling Standards proposed rule		
#	Proposed Rule Section	Comment	
16	173-350-320	Ecology should include an exemption for contaminated soil stored at facilities that already have a water quality sand and gravel or construction stormwater permit. Similar to exemptions provided for brick, cured concrete, or asphaltic material, these water quality permits can be used to address water quality concerns and will remain in effect until materials are removed.	
17	173-350-320 Preliminary Regulatory Analysis, page 24 and 31	In the preliminary regulatory analysis estimates the costs of piles facilities that will be required to keep records, submit notifications, and annual reporting to be 1 hour of owner/operator time per facility (page 24, underline added). Whereas the benefits of the proposed rule that would allow some piles facilities to avoid costs of annual reporting were estimated as 4 hours of owner/operator time per facility (page 31). Ecology should review the cost benefit analysis to ensure that identical activities are estimated at the same number of units of time in the cost and benefit sections. Ecology should also consider industry interviews to ensure that 1 hour of owner/operator time is	
		an accurate estimate for record keeping, submitting notifications and annual reporting for a typical piles facility. Costs should include tracking, database management and annual reporting.	
18	173-350-320 Preliminary Regulatory Analysis, page 24	The cost benefit analysis for Piles used for storage or treatment mentions new costs associated with notifications and annual reports rather than the full cost of permitting when recycling wastes. This is based on the assumption that these facilities have a sand and gravel permit or construction stormwater permit. There will be some facilities however that store brick, cured concrete or asphaltic materials in quantities greater than 250 cubic yards that don't have one of these permits and these facilities will have to obtain one to be in compliance with the new rule. They may also have to track costs, manage data and prepare annual reports if they are recycling the materials. An evaluation should be made how many facilities will need to obtain one of the required permits and the data management costs associated with tracking and annual reporting for the cost benefit analysis to be accurate and complete.	
19	173-350 Preliminary Regulatory Analysis	Ecology is required under the Administrative Procedures Act to "determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented." Some Road Maintenance Agencies have provided significant information on the probable costs of the initial draft, preliminary draft and the proposed rule during comment periods to Ecology. Ecology must fulfill its obligation	

¹⁸ RCW 34.05.328 (d)

	Table 1 : Comments on the Solid Waste Handling Standards proposed rule		
#	Proposed Rule Section	Comment	
		under the Administrative Procedures Act and include these costs in	
		the preliminary regulatory analysis.	
20	173-350	Ecology is required under the Administrative Procedures Act to	
		"determine that the probable benefits of the rule are greater than	
	Preliminary Regulatory	its probable costs, taking into account both the qualitative and	
	Analysis	quantitative benefits and costs and the specific directives of the	
		statute being implemented." Ecology should include further detail	
		in the Preliminary Regulatory analysis of how this proposed rule	
		would help implement RCW 70.95, which specifically requires the	
		department of transportation and certain government entities to	
		reuse construction aggregate and recycled concrete (effective 1	
		January 2016) ²⁰ .	

Suggestions

The Forum would like to provide several suggestions that would reduce the overall costs and impacts associated with the proposed rule while retaining a more protective standard than the current Solid Waste Handling Standards. Acceptance of these suggestions would reduce but not eliminate the costs and impacts to agencies that manage transportation infrastructure. Costs and impacts of the proposed rule to agencies that manage transportation infrastructure should be included in the SEPA documentation and the preliminary regulatory analysis.

These suggestions should also not be viewed to eliminate concerns expressed in Table 1; especially with regard to the scope of the Department of Ecology's authority to enact the proposed rule under RCW 70.95. The Forum feels that regardless of the acceptance or rejection of the suggestions below that the Department of Ecology should seek an opinion from the Attorney General to ensure that Ecology is within its scope of authority to regulate soils in this way under RCW 70.95.

Suggestion 1: One of the primary impacts of the Contaminated Soil, Clean Soil, and Contaminated dredged Material and Clean Dredged Material definitions is that a disposal or re-use site must be known at the time soil is excavated. Revising section (a) of these definitions as suggested below would retain a MTCA-based protective standard, maintain flexibility if the regulated community wants to undergo a full MTCA scoping analysis, allow for soil recyclers to accept soil in two categories for all potential reuse and reuse at industrial properties where the exact site of re-use is unknown at the time material is accepted. This suggestion would not resolve underlying issues with implementing the scoping evaluation of MTCA whereby to determine what standard to test soils the regulated community would need to first know if a soils is contaminated for the purposes of the terrestrial ecological evaluation. This suggestion would also not resolve the overall costs of instituting this more protective standard. The suggested revision for part (a) of the Contaminated Soil, Clean Soil, and Contaminated dredged Material and clean dredged material definitions is:

(a) Contains [or does not contain] contain contaminants at concentrations that exceed a cleanup level established under:

²⁰ RCW 70.95.805 paraphrased

¹⁹ RCW 34.05.328 (d)

- Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340) for all potential reuse, or
- Table 745-1 Method A Soil Cleanup Levels for Industrial Properties (WAC 173-340) for reuse at industrial properties, or
- Another cleanup level set through the Model Toxics Control Act-Cleanup that would be established for the location where soil [or dredged material] is placed.

Suggestion 2: The Forum has determined that several examples provided in the Contaminated Soils definition do not meet the underlying definition (see comment 7 and 8). The Forum has interpreted that Ecology included Street Waste as an example of Contaminated Soil in order to recognize that contaminants may accumulate in the environment. However including this as an example of Contaminated Soil effects the interpretation of release, in effect making this part of the definition meaningless because they would have to include routine vehicle operations to which most soil in the built environment is subject. The Forum respectfully requests that Ecology define soils that may be cumulatively impacted by contaminants (such as Street Wastes) separate from the underlying definition of release; and that the determination of when contaminants have accumulated to an extent to require testing be based on the professional judgement of the agency managing the transportation infrastructure or municipal separate storm sewer system. Accepting this suggestion would recognize that contaminants can accumulate in some Street Wastes in excess of a MTCA clean-up level, but would eliminate the costs of testing soils in the built environment that are unlikely to exceed a MTCA clean-up level. Accepting this suggestion would eliminate many costs associated with testing and storage of materials, handling materials twice and reduce the greenhouse gas emissions of managing transportation infrastructure under the proposed rule.