SEPA¹ Environmental Checklist

Margin Notes by Ragene Ch**ti**stensch NRSI DNR Forest Practices

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal**, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for nonprojects) questions in "Part B: Environmental Elements" that do not contribute meaningfully to the analysis of the proposal.

¹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance

A.Background

Find help answering background questions²

1. Name of proposed project, if applicable:

Lane Mountain West Fill

2. Name of applicant:

Lane Mt Silica Co

3. Address and phone number of applicant and contact person:

Steve Lane

Physical- 3119 HWY 231 Valley, WA 99181 Office - (509)937-2221

Mailing- PO Box 127 Valley WA 99181 Office - (509)936-4987

4. Date checklist prepared:

12/18/2024

5. Agency requesting checklist:

DNR

6. Proposed timing of schedule (including phasing, if applicable):

Timber Harvest – 2025

Fill Placement – 2025 to ~2029

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

None

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None

10. List any government approvals or permits that will be needed for your proposal, if known.

Unknown

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on

² https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background

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this page. (Lead agencies may modify this form to include additional specific information on project description.)

All merchantable timber will be harvest from the unit. Fill storage will then occur over the next 3-4 years. Estimated ~225,000 tons/175,000 cubic yards of fill material. Material will come from plant site. Please see attached Site Plan and further documents for more information.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The S1/2 of the SW1/4, S22, T31NR39E, Stevens Co. See attached map.

B.Environmental Elements

1. Earth

Find help answering earth questions³

a. General description of the site:

Depression in the mountainside right off of the main haul road. Across the depression from the road is a small timbered knoll. No typed water present.

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

b. What is the steepest slope on the site (approximate percent slope)? Forest Practices ~60%
~60%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

-Huckle Dry Rock Outcrop Complex

-Huckle Ashy Silt Loam

-Aits Loam

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

³ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklistguidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth

None

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. Fill storage consisting of plant tailings. Unit size is about 8 acres. ~225.000 tons/175.000

cubic yards of fill estimated.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

Small amount of erosion could occur due to storm water. This runoff will be captured by drainage features, coarse material on site, and existing vegetation bordering the site.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

None

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

Implemented drainage features, surrounding vegetation and coarse material on-site will capture sediment. See attached word document for more details.

2. Air

Find help answering air questions⁴

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

General emissions from logging equipment and trucks, as well as emissions from dump trucks hauling fill material.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Water truck available on site.

⁴ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklistguidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air

3. Water

Find help answering water questions⁵

- a. Surface: Find help answering surface water questions⁶
 - Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

No

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No

3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.

No

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

b. Ground:

Find help answering ground water questions⁷

1. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.

⁵ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklistguidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water ⁶ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-

guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmentalelements-Surface-water

⁷ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater

No

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

N/A

c. Water Runoff (including stormwater):

1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water/precipitation. Plant based fill material, drainage features, and vegetation will collect water runoff and sediment.

2. Could waste materials enter ground or surface waters? If so, generally describe.

No

3. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

None further

4. Plants

Find help answering plants questions

a. Check the types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

Shrubs

🗌 grass

pasture

Crop or grain

- □ orchards, vineyards, or other permanent crops.
- □ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- □ water plants: water lily, eelgrass, milfoil, other
- □ other types of vegetation

- b. What kind and amount of vegetation will be removed or altered? All merchantable timber
- c. List threatened and endangered species known to be on or near the site. Proposal uncuch None Put sortst practices aged warvest Risk assessment No
- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

None

e. List all noxious weeds and invasive species known to be on or near the site. Canadian thistle, houndstongue

5. Animals

Find help answering animal questions⁸

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site.

Examples include:

- Birds: hawk, heron, eagle, songbirds, other:
- Mammals: deer, bear, elk, beaver, other:
- Fish: bass, salmon, trout, herring, shellfish, other:

Deer, elk, bear, cougar, hawk, songbirds, rodents

- b. List any threatened and endangered species known to be on or near the site. | Per forest Practices Risk as seement None
- c. Is the site part of a migration route? If so, explain. No No No
- d. Proposed measures to preserve or enhance wildlife, if any. Migruhing None
- e. List any invasive animal species known to be on or near the site.

None

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⁸ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals

6. Energy and natural resources

Find help answering energy and natural resource questions⁹

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

General diesel fuel consumption by logging equipment and trucks, and dump trucks.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

None

7. Environmental health

Health Find help with answering environmental health questions¹⁰

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

None

 Describe any known or possible contamination at the site from present or past uses.

None

2. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None

 Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None

4. Describe special emergency services that might be required.

Spill Kit

 ⁹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou
 ¹⁰ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-checklist-Section-B-Environmental-elements/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-checklist-Section-B-Environmental-elements/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health

5. Proposed measures to reduce or control environmental health hazards, if any.

None

- b. Noise
 - 1. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Traffic, equipment, both logging and mining operations

2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?

General truck and logging operation noise levels

3. Proposed measures to reduce or control noise impacts, if any:

None

8. Land and shoreline use

Find help answering land and shoreline use questions¹¹

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Timber growth & mining activities. Will not affect surrounding land uses.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Working forest land. ~8 acres

1. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?

No

c. Describe any structures on the site.

None

d. Will any structures be demolished? If so, what?

N/A

e. What is the current zoning classification of the site?

Timber

¹¹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use

- f. What is the current comprehensive plan designation of the site? DFL
- g. If applicable, what is the current shoreline master program designation of the site? N/A
- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No

- i. Approximately how many people would reside or work in the completed project? None
- j. Approximately how many people would the completed project displace? None
- k. Proposed measures to avoid or reduce displacement impacts, if any.

None

I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

None

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None

9. Housing

Find help answering housing questions¹²

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

N/A

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

N/A

c. Proposed measures to reduce or control housing impacts, if any:

N/A

¹² https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing

10. Aesthetics

Find help answering aesthetics questions¹³

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

N/A

b. What views in the immediate vicinity would be altered or obstructed?

None

c. Proposed measures to reduce or control aesthetic impacts, if any:

None

11. Light and glare

Find help answering light and glare questions¹⁴

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

N/A

b. Could light or glare from the finished project be a safety hazard or interfere with views?

N/A

c. What existing off-site sources of light or glare may affect your proposal?

N/A

d. Proposed measures to reduce or control light and glare impacts, if any:

N/A

12. Recreation

Find help answering recreation questions

a. What designated and informal recreational opportunities are in the immediate vicinity?

Limited opportunities for hiking/hunting on private land with permission

b. Would the proposed project displace any existing recreational uses? If so, describe.

No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

¹³ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics

¹⁴ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare

13. Historic and cultural preservation

Find help answering historic and cultural preservation questions¹⁵

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation (No Known registers? If so, specifically describe.

No

No Known Cultural, Historic, or archeoblogical sites were found During Corest fraction List Assessment

b. Are there any landmarks, features, or other evidence of Indian or historic use or Lisk Hesses occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Field Observations

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None

14. Transportation

Find help with answering transportation questions¹⁶

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

None

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No

c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No

¹⁵ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p
¹⁶ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-checklist-section-B-Environmental-elements/Environmental-elements-14-Transportation

d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

~50 trips/day including normal operational trips. Fill material will be back haul from plant on commercial trucks.

f. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

g. Proposed measures to reduce or control transportation impacts, if any:

None

15. Public services

Find help answering public service questions¹⁷

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. Utilities

Find help answering utilities questions¹⁸

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

None

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None

¹⁷ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services
¹⁸ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities

C.Signature

Find help about who should sign¹⁹

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Type name of signee: Steve Lane Position and agency/organization: Plant Manager LM Silica Co. Date submitted: 12/18/24

D.Supplemental sheet for nonproject actions

Find help for the nonproject actions worksheet²⁰ **Do not** use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

- 1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?
 - Proposed measures to avoid or reduce such increases are:
- 2. How would the proposal be likely to affect plants, animals, fish, or marine life?
 - Proposed measures to protect or conserve plants, animals, fish, or marine life are:

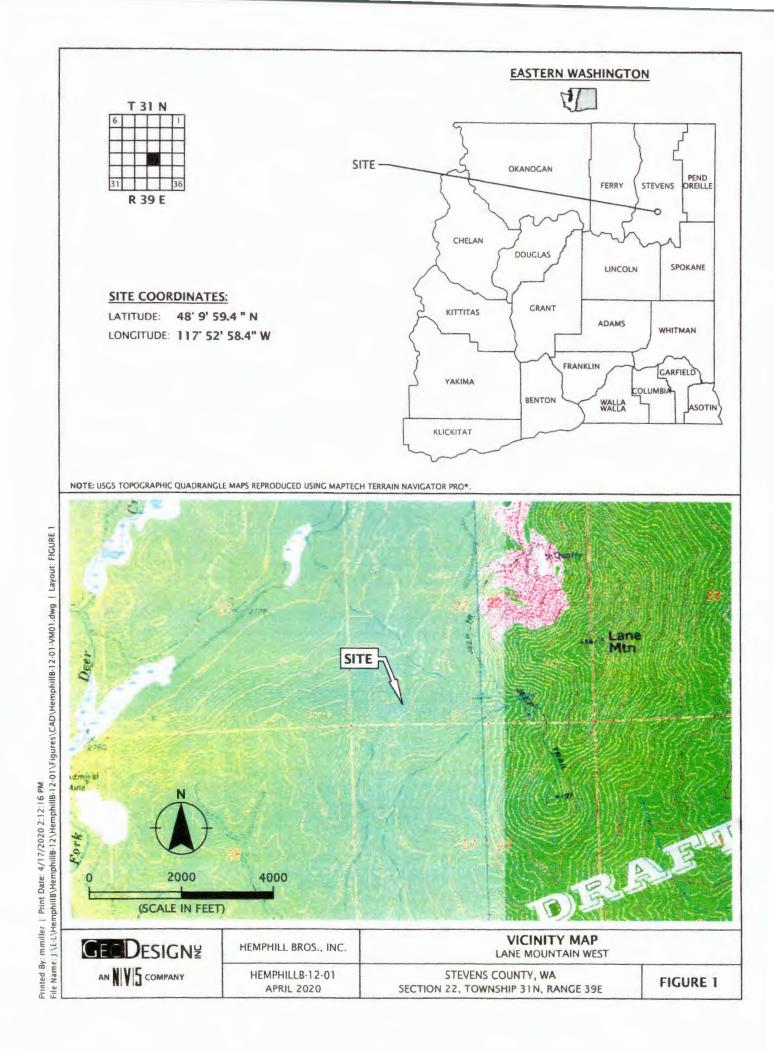
¹⁹ https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature

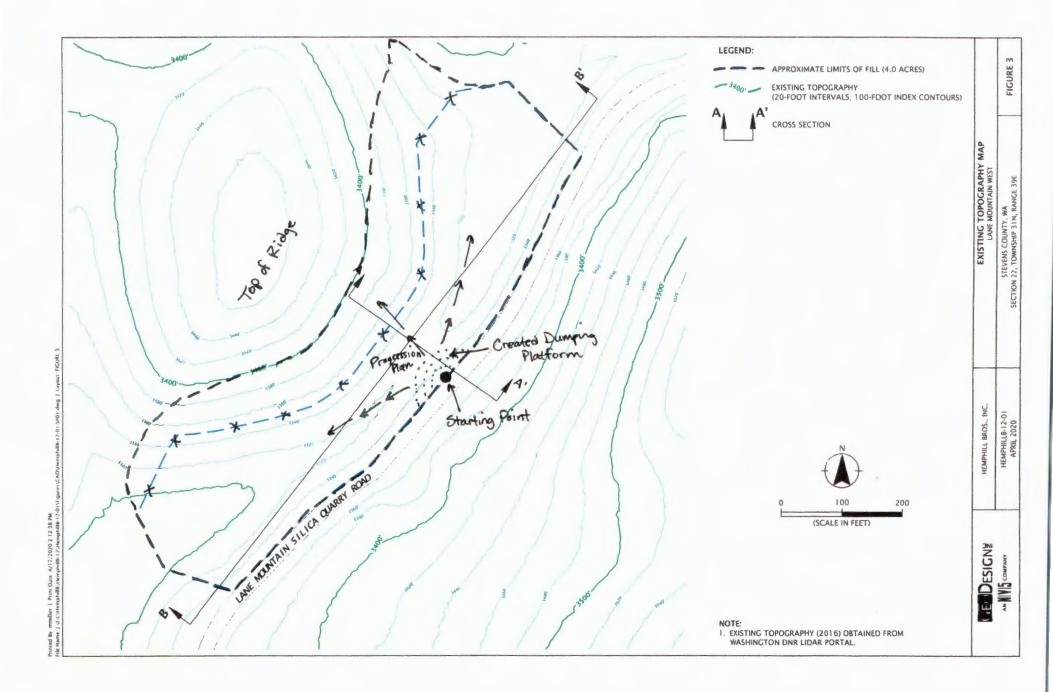
²⁰ https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions

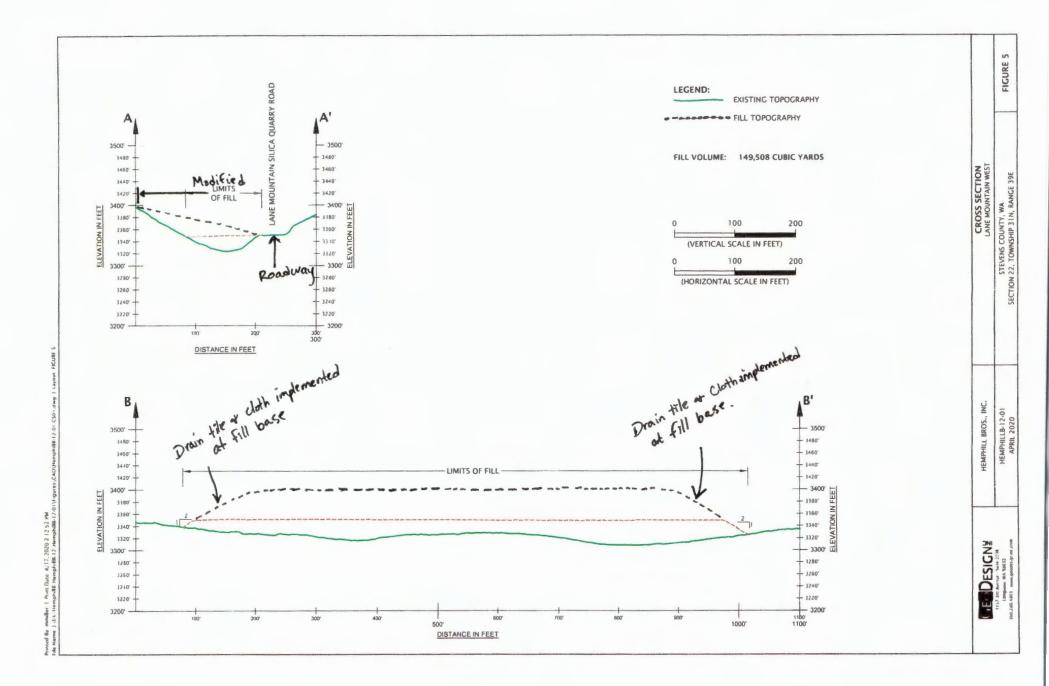
- 3. How would the proposal be likely to deplete energy or natural resources?
 - Proposed measures to protect or conserve energy and natural resources are:
- 4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?
 - Proposed measures to protect such resources or to avoid or reduce impacts are:
- 5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?
 - Proposed measures to avoid or reduce shoreline and land use impacts are:
- 6. How would the proposal be likely to increase demands on transportation or public services and utilities?
 - Proposed measures to reduce or respond to such demand(s) are:
- 7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

Fill Site Plan

Fill will be hauled to the fill site from the plant located in Valley, WA. Trucks will use segment of HWY 231 to access Waitts Lake HWY, where they will drive 8m miles to get to the Lane Mt quarry access road. Fill area is approximately 2 miles up the guarry access road. Loads will be hauled as backhaul from the plant as trucks are making their routine return trip to quarry. Estimated final pile dimensions ~250' (W) x ~1000' (L) x ~80' (D). See attachment 2 for description of fill material. Fill area will not fill the entire footprint of unit 1. The top of the ridge will not be included in fill footprint. Total fill volumes estimated at ~175,000 cubic yards/225,000 tons. Estimated final pile dimensions ~250' (W) x ~1000' (L) x ~60' (D). Steepest slope that the fill will be deposited on is fill bank of road, estimated at 70%. Steepest fill slope when operations are complete will be 2:1. North and South extent of fill areas will be ~2:1. Some loads will contain a mixture of both sand/rock aggregate and clay material, while some loads will be separated and deposited in layers. Compaction will be accomplished by loaded trucks bringing fill to the site and driving on deposited fill surface. Fill loads will start at starting point (defined on attached map) to create a dumping platform where trucks can then drive in on fill material to progress fill material further South and North. Further compaction by front end loader and dynapac vibrating roller as fill process continues. After logging operations are complete, remaining vegetation (including some stumps) and layer of top soil from bottom of fill area will be removed and stored at either end of fill extent (North and South ends). Fill material has natural infiltration properties. Drain tile and filtration cloth will be located at North and South end of the fill extent.







Defining Glass Quality Since 1927

	Revision: 0		
Kay Tomsha		Order #:	A9599
Lane Mountain Co.		PO #:	K2320
PO Box 127		Entered:	09/26/2016
Valley, WA 99181	Page 1 of 1	Completed:	10/12/2016

Glass Research

Analysis of Sand

Description	9-23-16-LM200	
Sample ID	A9599-1	
% SiO ₂	92.8	
% Al ₂ O ₃	3.82	
% Fe ₂ O ₃	0.97	
% TiO ₂	0.48	
% CaO	0.013	
% MgO	0.13	
% Na ₂ O	0.058	
% K ₂ O	1.11	
% LOI @ 1000°C	0.72, 0.73	

If the sample received from the customer was removed from a larger quantity of material, the sample must be representative of that quantity for the results to be applicable. Per customer request, the sample was dried and foreign material removed prior to analysis. The results are reported on the "dry sample" basis. Loss on ignition was determined in duplicate for quality assurance purposes.

Method Summary:

American

Prep: MA-0015 Rev. 0, OH.9.2.110 Rev. 1 Sand: AM-I-0034 Rev. 1, LP-0202 Issue 7/16/03

References:

PFNB-318/21 PFNB-303/24 PFNB-311/28-29 A-111/45 A-131/24-25

Prepared By:

Comici Canice R. Bielski Chemist

Date

Reviewed/Approved By:

Neal T. Nichols Manager

13/12/14

Date

Consulting, Training, and Analytical Services for Glass Packaging 349 Tomahawk Drive · Maumee, OH 43537 · Phone: 419-897-9000 · www.americanglassresearch.com

i LM200-5.		3% <u>- 91/ GX</u>
2 3 Weight % F		
4 5 Date	11/26/2024	average
6 7 Screen Size		
8 12 9 16	0.00	0.02
0 20	0.20	0.03 0.13
1 30 2 40	0.80	0.36
3 50	3.50	0.90 2.39
4 70 5 100	6.70 15.20	4.85 11.28
6 140	27.10	23.56
17 200 18 PAN	29.60 15.20	31.62 24.88
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Regision ()

Kap Comsha
Fanc Mountain Co.
P.O. Box 127 3119 Hwy 231
Volley, WA 99181

Project:	2008005105
PO St	1 54 80
Entered:	11-11/08
Completed:	.)2/()9/()9

Pageloff

Analysis of Clay

Description	Autumn Clay		
Sample ID	0800021981		
% SiO ₂	82.2		
% AbOs	in the second seco		
% Fe-O:	1.84		
º¦e TiO₂	0.56		
"o CaO	(), (()		
° h MgO	0.28		
"6 K2O	! 80		
% LOI (a 1000°C	3.08		

if the sample that was received from the customer was removed from a larger quantity of material, the sample must be representative of that quantity for the results to be applicable.

Nethod Summarr:

CaO, MgO, K2O, LOE AM-1-0053 Rest 4 Silog AlgOs, Fe2Os, 7:O2: LP-0202 (ssoc bate 7:16/03

References

FEDH12(-21) 1:1267-55 151279 ± 195034152-10

Proparte By

Keylewed/Approved By:

Braun Date

Neal T. Michols Manager, Materials Testing Tester

Then yes for using West Analytical Surveys.



