RESOLUTION 2021-HH

A RESOLUTION OF THE TOWN OF EATONVILLE, WASHINGTON, AUTHORIZING THE MAYOR TO EXECUTE AN INTERAGENCY AGREEMENT WITH THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY

WHEREAS, between 1950 and 1980, the Town of Eatonville ("Town") leased property from Weyerhaeuser Company ("Weyerhaeuser") for the purposes of operating a municipal landfill; and

WHEREAS, upon closure of the landfill, proper mitigation measures were not taken to clean up the municipal waste; and

WHEREAS, on August 9, 2021, the Town and Weyerhaeuser entered into Agreed Order DE 20072 with the Washington State Department of Ecology ("Ecology") to provide remedial action at the site; and

WHEREAS, the purpose of the Interagency Agreement, attached hereto as exhibit A, is to fund and satisfy the requirements of the approved Agreed Order; now, therefore,

THE TOWN COUNCIL OF THE TOWN OF EATONVILLE, WASHINGTON, HEREBY RESOLVES AS FOLLOWS:

THAT: The Town Council approves substantially in the form presented, and the Mayor is authorized to execute, the Interagency Agreement with the State of Washington, Department of Ecology, hereto attached as Exhibit A.

PASSED by the Town Council of Town of Eatonville and attested by the Town Clerk in authentication of such passage this 23rd day of August 2021.

	Mike Schaub, Mayor	
ATTEST:		
Miranda Doll, Town Clerk	_	



INTERAGENCY AGREEMENT (IAA)

BETWEEN

THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY

AND

TOWN OF EATONVILLE

THIS INTERAGENCY AGREEMENT ("Agreement" or "IAA") is made and entered into by and between the state of Washington, Department of Ecology, hereinafter referred to as "ECOLOGY," and the Town of Eatonville hereinafter referred to as the "TOWN" and "CONTRACTOR," pursuant to the authority granted by Chapter 39.34 RCW.

THE PURPOSE OF THIS AGREEMENT is to satisfy the requirements of Agreed Order DE 20072 related to the former Eatonville Landfill. In order to do this, the **TOWN** will conduct the following activities: draft a remedial investigation work plan, perform a site reconnaissance, perform a geotechnical study, perform a remedial investigation, perform a feasibility study, and draft a preliminary draft cleanup action plan.

WHEREAS, ECOLOGY has legal authority under RCW 70A.305 and TOWN has legal authority under RCW 35.21.730 that allows each party to undertake the actions in this agreement.

THEREFORE, IT IS MUTUALLY AGREED THAT:

1. SCOPE OF WORK

TOWN shall furnish the necessary personnel, equipment, material and/or service(s) and otherwise do all things necessary for or incidental to the performance of the work set forth in Appendix A, *Statement of Work and Budget*, attached hereto and incorporated herein.

2. PERIOD OF PERFORMANCE

The period of performance of this IAA will commence on **ECOLOGY's** signature, and be completed by **June 30, 2023**, unless the Agreement is terminated sooner as provided herein. Amendments extending the period of performance, if any, shall be at the sole discretion of ECOLOGY.

Entity Name: Town of Eatonville

3. COMPENSATION

Compensation for the work provided in accordance with this IAA has been established under the terms of RCW 39.34.130 and RCW 39.26.180(3). This is a performance-based agreement, under which payment is based on the successful completion of expected deliverables.

The source of funds for this IAA is state funding. Both parties agree to comply with all applicable rules and regulations associated with these funds.

The parties have determined that the cost of accomplishing the work identified herein will not exceed \$357,000.00 dollars, including any indirect charges. Payment for satisfactory performance of the work shall not exceed this amount unless the parties mutually agree via an amendment to a higher amount. Compensation for services shall be based on the terms and tasks set forth in Appendix A, *Statement of Work and Budget*. ECOLOGY will not make payment until it has reviewed and accepted the work.

ECOLOGY may, at its sole discretion, terminate or suspend this Contract, or withhold payments claimed by the TOWN for services rendered, if the TOWN fails to satisfactorily comply with any term or condition of this Agreement.

4. BILLING AND PAYMENT PROCEDURE

Payment requests shall be submitted on state form, Invoice Voucher A19-1A. Invoice voucher shall reference the Agreement (IAA) number and clearly identify those items that relate to performance under this Agreement. Invoices shall describe and document to ECOLOGY's satisfaction a description of the work performed, the progress of the work, and related costs. Attach supporting documentation to the invoice.

Send invoices to:

State of Washington Department of Ecology Toxics Cleanup Program Attn: Angela Harkins PO Box 47600 Olympia, WA 98504-7600

Payment requests may be submitted on a quarterly basis. Upon expiration of this Agreement, any claim for payment not already made shall be submitted to ECOLOGY within 30 days after the expiration date or the end of the fiscal year, whichever is earlier.

Payment will be made within thirty (30) days of submission of a properly completed invoice (form A19-1A) with supportive documentation. All expenses invoiced shall be supported with copies of invoices paid.

Payment will be issued through Washington State's Office of Financial Management's Statewide Payee Desk. To receive payment, CONTRACTOR must register as a statewide vendor by submitting a statewide vendor registration form and an IRS W-9 form at website, https://ofm.wa.gov/itsystems/statewide-vendorpayee-services. For questions about the vendor registration process, contact Statewide Payee Help Desk at (360) 407-8180 or email PayeeRegistration@ofm.wa.gov.

Entity Name: Town of Eatonville

5. ALTERATIONS AND AMENDMENTS

This Agreement may be amended by mutual agreement of the parties. Such amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

6. ASSIGNMENT

The work to be provided under this Agreement, and any claim arising thereunder, is not assignable or delegable by either party in whole or in part, without the express prior written consent of the other party, which consent shall not be unreasonably withheld.

7. ASSURANCES

Parties to this Agreement agree that all activity pursuant to this agreement will be in accordance with all the applicable current federal, state, and local laws, rules, and regulations.

8. CONFORMANCE

If any provision of this Agreement violates any statute or rule of law of the state of Washington, it is considered modified to conform to that statute or rule of law.

9. DISPUTES

Parties to this Agreement shall employ every effort to resolve a dispute themselves without resorting to litigation. In the event that a dispute arises under this Agreement that cannot be resolved among the parties, it shall be determined by a Dispute Board in the following manner. Each party to this Agreement shall appoint one member to the Dispute Board. The members so appointed shall jointly appoint an additional member to the Dispute Board. The Dispute Board shall review the facts, agreement terms, and applicable statutes and rules, and then make a determination of the dispute. The determination of the Dispute Board shall be final and binding on the parties hereto, unless restricted by law. The cost of resolution will be borne by each party paying its own cost. As an alternative to this process, if state agencies, either of the parties may request intervention by the Governor, as provided by RCW 43.17.330, in which event the Governor's process will control. The parties may mutually agree to a different dispute resolution process.

10. FUNDING AVAILABILITY

ECOLOGY's ability to make payments is contingent on availability of funding. In the event funding from state, federal, or other sources is withdrawn, reduced, or limited in any way after the effective date and prior to completion or expiration date of this Agreement, ECOLOGY, at its sole discretion, may elect to terminate the Agreement, in whole or part, for convenience or to renegotiate the Agreement subject to new funding limitations and conditions. ECOLOGY may also elect to suspend performance of the Agreement until ECOLOGY determines the funding insufficiency is resolved. ECOLOGY may exercise any of these options with no notification restrictions, although ECOLOGY will make a reasonable attempt to provide notice.

In the event of termination or suspension, ECOLOGY will reimburse eligible costs incurred by the TOWN through the effective date of termination or suspension. Reimbursed costs must be agreed to by ECOLOGY and the TOWN. In no event shall ECOLOGY's reimbursement exceed ECOLOGY's total responsibility under the agreement and any amendments.

Entity Name: Town of Eatonville

11. GOVERNING LAW AND VENUE

This Agreement is entered into pursuant to and under the authority granted by the laws of the state of Washington and any applicable federal laws. The provisions of this Agreement shall be construed to conform to those laws. This Agreement shall be construed and interpreted in accordance with the laws of the state of Washington, and the venue of any action brought hereunder shall be the Superior Court for Thurston County.

12. INDEPENDENT CAPACITY

The employees or agents of each party who are engaged in the performance of this Agreement shall continue to be employees or agents of that party and shall not be considered for any purpose to be employees or agents of the other party.

13. ORDER OF PRECEDENCE

In the event of an inconsistency in the terms of this Agreement, or between its terms and any applicable statute or rule, the inconsistency shall be resolved by giving precedence in the following order:

- a. Applicable federal and state of Washington statutes, regulations, and rules.
- b. Mutually agreed upon written amendments to this Agreement.
- c. This Agreement, number C2200079.
- d. Appendix A, Statement of Work and Budget.
- e. Appendix B, Special Terms and Conditions.
- f. Any other provisions or term of this Agreement, including materials incorporated by reference or otherwise incorporated.

14. RECORDS MAINTENANCE

The parties to this Agreement shall each maintain books, records, documents, and other evidence that sufficiently and properly reflect all direct and indirect costs expended by either party in the performance of the service(s) described herein. These materials shall be subject to inspection, review, or audit by personnel of both parties, other personnel duly authorized by either party, the Office of the State Auditor, and federal officials so authorized by law. All books, records, documents, and other materials relevant to this Agreement must be retained for six years after expiration of this Agreement. The Office of the State Auditor, federal auditors, and any persons duly authorized by the parties shall have full access and the right to examine any of these materials during this period. Each party will utilize reasonable security procedures and protections for all materials related to this Agreement. All materials are subject to state public disclosure laws.

15. RESPONSIBILITIES OF THE PARTIES

Each party of this Agreement hereby assumes responsibility for claims and/or damages to persons and/or property resulting from any act or omissions on the part of itself, its employees, its officers, and its agents. Neither party will be considered the agent of the other party to this Agreement.

Entity Name: Town of Eatonville

16. RIGHTS IN DATA

Unless otherwise provided, data which originates from this Agreement shall be "work made for hire" as defined by the United States Copyright Act, Title 17 U.S.C. section 101 and shall be owned by state of Washington, ECOLOGY. Data shall include, but not be limited to, reports, documents, pamphlets, advertisements, books magazines, surveys, studies, computer programs, films, tapes, and/or sound reproductions. Ownership includes the right to copyright, patent, and register these items, and the ability to transfer these rights.

17. SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the fundamental purpose of this Agreement, and to this end the provisions of this Agreement are declared to be severable.

18. SUBCONTRACTORS

TOWN agrees to take complete responsibility for all actions of any Subcontractor used under this Agreement for the performance. When federal funding is involved there will be additional contractor and subcontractor requirements and reporting.

Prior to performance, all subcontractors who will be performing services under this Agreement must be identified, including their name, the nature of services to be performed, address, telephone, WA State Department of Revenue Registration Tax number (UBI), federal tax identification number (TIN), and anticipated dollar value of each subcontract. Provide such information to ECOLOGY's Agreement manager.

19. SUSPENSION FOR CONVENIENCE

ECOLOGY may suspend this Agreement or any portion thereof for a temporary period by providing written notice to the TOWN a minimum of seven (7) calendar days before the suspension date. TOWN shall resume performance on the first business day following the suspension period unless another day is specified in writing by ECOLOGY prior to the expiration of the suspension period.

20. TERMINATION FOR CAUSE

If for any cause, either party does not fulfill in a timely and proper manner its obligations under this Agreement, or if either party violates any of these terms and conditions, the aggrieved party will give the other party written notice of such failure or violation. The responsible party will be given the opportunity to correct the violation or failure within fifteen (15) business days. If failure or violation is not corrected, this Agreement may be terminated immediately by written notice of the aggrieved party to the other.

21. TERMINATION FOR CONVENIENCE

Either party may terminate this Agreement without cause upon thirty (30) calendar day prior written notification to the other party. If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

IAA No. C2200079

Entity Name: Town of Eatonville

22. WAIVER

A failure by either party to exercise its rights under this Agreement shall not preclude that party from subsequent exercise of such rights and shall not constitute a waiver of any other rights under this Agreement unless stated to be such in a written amendment to this Agreement signed by an authorized representative of the parties.

23. AGREEMENT MANAGEMENT

The representative for each of the parties shall be responsible for and shall be the contact person for all communications, notifications, and billings questions regarding the performance of this Agreement. The parties agree that if there is a change in representatives, they will promptly notify the other party in writing of such change, such changes do not need an amendment.

The ECOLOGY Representative is:

Vancouver, WA 98682

The TOWN Representative is:

Name: Craig Rankine Name: Abby Gribi

Address: Ecology Vancouver Field Office
Address: Town of Eatonville
12121 NE 99th Street, Suite 2100
201 Center Street W

201 Center Street West Eatonville, WA 98328

Phone: (360) 216-9394 Phone: (360) 832-3361

Email: cran461@ecy.wa.gov Email: townadmin@eatonville-wa.gov

State of Washington, Department of Ecology IAA No. C2200079 Entity Name: Town of Eatonville

24. ALL WRITINGS CONTAINED HEREIN

This Agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto.

The signatories to this Agreement represent that they have the authority to bind their respective organizations to this Agreement.

IN WITNESS WHEREOF, the parties below, having read this Agreement in its entirety, including all attachments, do agree in each and every particular as indicated by their signatures below.

State of Washington Department of Ecology		Town of Eatonville	
By:		By:	
Signature	Date	Signature	Date
Heather R. Bartlett		Print Name	
Deputy Director		Title	

State of Washington, Department of Ecology IAA No. C2200079 Entity Name: Town of Eatonville

APPENDIX A

STATEMENT OF WORK AND BUDGET

Background

The former Eatonville Landfill is near the Town of Eatonville in rural Pierce County. Weyerhaeuser owns and has leased the Site to the Town for use as a landfill. Refuse was dumped at this Site from 1950 to 1980. It is an unlined, unfenced dump site about two (2) acres in size. Municipal solid waste, appliances, car parts, empty drums, tires, and other waste(s) were disposed of at the landfill. Waste burning did also occur at the Site.

The landfill is located on a very steep slope in a remote and forested area. Vehicles can reach the top of the landfill but access to the rest of the Site is by foot only. The landfill surface is covered with grass, weeds, blackberry plants, fill soil and gravel and scattered metal, glass and plastic debris. The landfill is boarded by dense forest/brush on both sides and the base. It appears that imported fill from a nearby quarry has been used as landfill cover. This imported fill material contains a significant percentage of round gravels and cobbles that does not provide a very cohesive cover and refuse is protruding from the cover in various locations throughout the Site.

Topography of the landfill face consists of sloped steps separated by very steep or near vertical portions. The landfill shape forms a topographic bulge extending down the slope. The length is approximately two (2) times longer (approx. 350 feet) than the width (approx. 175 feet). At the lower end of the landfill, the ground becomes a flat area which is covered by wetland. This area is a mix of heavily vegetated marshy soft ground, dry soil areas, and pockets of standing water and water seeps. Water from a spring surfaces outside the landfill footprint on the northwest side and is flowing between five (5) to ten (10) gallons per minute. The spring surface water flows beneath the lower portion of the landfill. The spring water and water from seeps at the landfill base feed the wetland area and excess wetland water forms a stream that flows about thirteen hundred (1,300) feet to the Mashel River. The river is located within four-hundred (400) to five-hundred (500) feet east of the landfill's closest point but the creek takes a longer path to the river. The Mashel River is a major tributary of the Nisqually River, and provides critical spawning and rearing habitat for Fall Chinook salmon and steelhead.

Previous sampling events were conducted at the Site. In 1996, surface water, including seeps, springs, and wetlands were sampled. Sampling results indicated concentrations of iron and zinc and pH readings exceeding Washington State surface water quality standards (WAC 173-201A). In 2021, surface water and groundwater sampling was conducted. Surface water included seeps, a spring, and a stream. Analytical laboratory reports indicate no detections of volatile organic compounds (VOCs) including polybrominated diphenyl ethers (PBDE) and no semi-volatile organic compounds (SVOCs) above method reporting limits. Metals analysis showed concentrations of lead and zinc. Based upon the age of the deposited refuse, other contaminants such as polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals may be present.

The Nisqually State Park surrounds the Eatonville landfill. In the future, it is planned to transfer ownership of the Eatonville landfill to the State Parks Department who will redevelop the landfill and incorporate it into the existing public park. The Nisqually State Park area holds cultural importance to the Nisqually Indian Tribe and they hold fishing, hunting, and gathering rights in the Nisqually watershed. ECOLOGY has entered into an Agreed Order with Weyerhaeuser and the Town of Eatonville. The Agreed Order directs cleanup of any hazardous substances and obtaining data for landfill closure.

IAA No. C2200079

Entity Name: Town of Eatonville

Scope of the Work

As required by Agreed Order DE 20072 (AO), the objective of this scope of work is to characterize the type and extent of contamination at the Eatonville Landfill.

Tasks that the TOWN is responsible to complete include the following:

Task 1: Prepare a Remedial Investigation Work Plan.

Task 2: Site Reconnaissance.

Task 3: Remedial Investigation.

Task 4: Remedial Investigation Report.

Task 5: Feasibility Study and Report

Task 6: Preliminary Draft Cleanup Action Plan.

Task 1 – Prepare Remedial Investigation Work Plan

The purpose of the remedial investigation is to obtain additional information necessary to fully characterize the landfill. This includes characterizing the sources, types, and extents of contamination present at the landfill. Two (2) sampling events are planned, during what is considered the dry period in September of 2021 and the wet period in March of 2022.

Considering the nature and scope of previous site investigations, it is expected that the scope of the remedial investigation work will be focused and targeted to address specific data gaps. It is critical that the remedial investigation work plan be developed in close coordination with ECOLOGY to avoid duplicating historical research, conducting work that has previously been performed, or missing areas of the landfill that require further investigation.

The field investigations will be restricted to those identified in the remedial investigation work plan or otherwise approved by ECOLOGY. The remedial investigation will meet the requirements stated in WAC 173-340-350

Task 1 Deliverables:

- 1. Draft remedial investigation work plan is due to ECOLOGY for review forty-five (45) days following the Agreed Order execution and will include the following:
 - a. Description of the field work tasks including sampling techniques.
 - b. Health and Safety Plan
 - c. Quality Assurance Project Plan.
 - d. Sampling and Analysis Plan.
- 2. Final remedial investigation work plan, including ECOLOGY's comments on the draft version is due to ECOLOGY at least two (2) weeks prior to starting field work.

Task 2 – Site Reconnaissance

Before there is any disturbance to the landfill through investigation activities, the Town will conduct an aerial survey using a quadcopter drone or similar to perform a video survey of the site extent. This survey will be performed in open areas mainly over the waste prism to determine existing conditions especially in areas where personnel access is limited due to safety concerns with exposed refuse and steep slopes. A certified and licensed drone operator will perform the survey.

An existing site base map will be enhanced using a Real Time Kinematic-Global Positioning System grade handheld device (tablet) to provide accurate feature locations. In addition, the tablet will have the capabilities of collecting photos that can be georeferenced in support of the reconnaissance. Reconnaissance activities will define:

Entity Name: Town of Eatonville

- Waste types,
- Boundaries,
- Areas with suspected risk for future slope failure,
- Indications of landslides that have occurred in the past,
- Storm water erosion and water cut valleys (rills) present within the waste prism footprint,
- Seeps and springs,
- Sample and monitoring point locations, and
- Other features of note.

<u>Task 2 Deliverable (to be incorporated into the remedial investigation report due ninety days following remedial investigation completion):</u>

- 1. Enhanced site base map will be used to show sample and monitoring locations and site features (spring, seeps, wetland area, dimensions of waste, any slope failure areas, storm water routes and erosional features).
 - a. This base map will be incorporated into the remedial investigation report that is due ninety (90) days following the completion of the remedial investigation (Task 3).

Task 3 – Remedial Investigation

Overall Task 3 Note:

The archaeologist who previously provided the review of this project, hired by Weyerhaeuser, will continue their role in this project to review field work plans and monitor on the ground as the TOWN and Weyerhaeuser deem necessary. An Inadvertent Discovery Plan (IDP) be used on Site and all field staff that are conducting work on the Site will be trained on how to use the IDP. If archaeological deposits are inadvertently discovered during any ground-disturbing activities, all said activities should be halted immediately in an area large enough to maintain integrity of the deposits as described in the IDP.

The following sub-tasks will be performed under this task:

<u>Sub-Task 3.1: Source and Contaminant Characterization – Soil Borings by Direct Push Technology and Landfill Gas Evaluation</u>

In the vehicle accessible area of the upper landfill up to fifteen (15) vertical soil borings using a direct-push drilling technology drill rig are planned. The object is to find the edges of the waste and when waste is encountered drill though it into native soil/bedrock. Drilling will continue five (5) feet into the native material. If no waste is encountered drilling will terminate at 10 feet below ground surface. Due to the possibility of borehole collapse or sloughing within the waste prism, a dual-tube drill rod system will be used to avoid uncertainty on characterizing waste extents and characteristics at varying depths.

Continuous soil sampling will be conducted during the drilling activities. Impacted soil material will be scanned using a photoionization detector (PID). The observations and readings will be recorded on field log forms. These borings are used to identify the depth and extent of waste material and help locate soil borings using hollow stem auger drilling.

Entity Name: Town of Eatonville

The direct-push technology drilling is used to detect any liquid and visually assess impacted soil by various field screening techniques, including:

- Olfactory indications,
- Discolorations,
- Leaching, and
- Sheen and other similar factors.

If any considerable amounts of impacted soil and/or leachate are present (enough to fill sample bottles for multiple analysis) within the waste prism borings, up to fifteen (15) samples may be collected. These will be selectively analyzed using the appropriate soil or groundwater analytical suites.

At select locations, if direct-push drilling technology sampling indicates locations where successful drilling maybe possible, up to three (3) additional hollow stem auger borings may be drilled to allow for geotechnical assessment (see Sub-Task 3.2). Auger drilling was not chosen as the primary drilling approach as augers have the potential to become entangled in waste.

All soil and/or liquid samples will be submitted to a certified and ECOLOGY approved laboratory for following analysis:

- Semi-volatile organic compounds,
- Volatile organic compounds,
- Polychlorinated biphenyls,
- Polycyclic aromatic hydrocarbons,
- Total petroleum hydrocarbons,
 - o Extractable petroleum hydrocarbon,
 - o Volatile petroleum hydrocarbons,
- Total organic carbon, and
- Metals (totals for soil, totals and dissolved for liquid):
 - o Arsenic,
 - o Barium,
 - o Beryllium,
 - o Cadmium,
 - o Chromium (III and VI),
 - o Cobalt,
 - o Copper,
 - o Lead,
 - o Nickel,
 - o Selenium.
 - o Silver.
 - o Thallium,
 - o Vanadium, and
 - o Zinc.

During drilling activities, landfill gas will be measured from open direct push technology borings using a direct read flammable gas meter that indicates gas levels relative to the lower explosive limit for methane. Anaerobic degradation of organic waste at landfills produce methane gas which poses a potential risk because methane is a flammable gas. Because the landfill has been undisturbed for forty (40) years and cover soil has not been effectively maintained, methane concentrations are anticipated to be low. Landfill gas odor can be an indicator methane is being produced.

Entity Name: Town of Eatonville

The presence of landfill gas will be evaluated during the upper landfill direct push technology drilling and below the upper landfill portion by monitoring soil gas probes. Landfill gas will be monitored from borings and probes in refuse during dry conditions (no measurable precipitation for at least 48 hours) above perched water or the water table. Flammable gas readings will be taken using a flammable gas meter from open push borings after the drill pipe has been removed. Soil gas levels will be recorded in percent of the lower explosive limit and recorded on daily the field log forms.

Landfill gas readings for mid and lower landfill portions will be obtained from hand driven soil gas probes constructed from 1-inch diameter black iron pipe, three (3) feet long, with slots cut into the pipe every six (6) inches. The probes will be hand driven through the landfill cover material into refuse and readings taken from the pipe top immediately after placement.

Areas where waste is not found during direct-push drilling, under this sub-task, will be candidates for hollow stem auger boring locations for geotechnical sampling and well installation. This information will be relayed via email from field contractor staff to TOWN, ECOLOGY and Weyerhaeuser as soon as known so the hollow stem auger boring locations can be selected.

<u>Sub-Task 3.1 Deliverables (to be incorporated into the remedial investigation report due ninety days following remedial investigation completion):</u>

- 1. Field log forms to record:
 - a. Soil characteristics,
 - b. Standard penetration testing, and
 - c. Hand sample depth interval information.
- 2. Boring logs.
- 3. Laboratory analytical reports.
- 4. Geotechnical modeling:
 - a. Results text,
 - b. Tables, and
 - c. Figures.
- 5. Archeologic field log(s) if applicable.

<u>Sub-Task 3.2: Geotechnical Site Assessment – Drilling and Hand Augering Methods</u>

The landfill is assumed to be structurally stable in its present state, as its configuration has not been modified for several decades and no large-scale landslides have occurred. However, to date, no geotechnical evaluations have been conducted to understand the degree of stability or subsurface geological conditions underlying landfill material. Due to the potential for remedial action involving removal of waste, which may modify drainage and disturb underlying soils, a comprehensive geotechnical analysis will be conducted prior to any waste removal or sampling activities. A certified geotechnical drilling contractor will be retained to assess geotechnical conditions and address potential stability concerns that may arise during remedial action.

Sampling to characterize geotechnical properties will be collected using an engine powered drill rig on the upper landfill portion and by hand using a hand auger in the wetland area. A hollow stem auger drill rig will be used drill two soil borings that will be used for well installation (discussed in Section 4.4 below). Soil sampling will be conducted during the drilling of these borings. Samples will be collected at least every 5 feet the auger is advanced using a split-spoon barrel sampler (1.4-inch inner diameter and 2-inch outer diameter) following standard penetration testing methodology according to American Society for Testing Material D 1586. This allows collection of disturbed soil samples to determine soil geotechnical properties. The sampler will be advanced a depth interval of 18 inches using a 140-pound steel hammer falling 30 inches and operated by a semi-automatic trip-hammer. Blow counts will be recorded as the number of blows required for each successive 6-inch penetration interval (N-values), and the penetration resistance

Entity Name: Town of Eatonville

(blows/feet) will be recorded as the number of blows required to drive the final twelve (12) inches of depth. These values and associated characteristics (hardness, stability, and lithological profiles) will be notated on a field log forms. Field information will be used to construct boring logs.

The geotechnical engineer will define split-spoon sampling intervals in the field. Samples will be logged for physical properties in accordance with the Unified Soil Classification System. Sample containers will be labeled, sealed, and transported to a laboratory for geotechnical testing. If multiple sample types are visually identified within a single standard penetration testing drive sample, the samples will be split, labeled, and analyzed independently. If possible, up to three additional hollow stem auger drilled soil borings will be advanced through the landfill.

Geotechnical soil samples will also be collected by hand augering at the toe of the landfill and the adjacent wetland area. Sample locations and depths will be identified by the geotechnical engineer in the field after evaluation of the soil lithology defined during environmental soil sampling and well installation. The geology and sample depths and characteristics will be logged for physical properties using a field log form in accordance with the Unified Soil Classification System, and be the sample containers will be labeled, sealed, and transported to a laboratory for geotechnical testing.

Field testing using a hand-held vane shear probe will be used by the geotechnical engineer to determine the value of undrained soil shear strength. This test is expected to be performed in moist soil, at a depth of one (1) to three (3) feet below ground surface. A hand auger may be used to advance the hole to a depth of approximately six (6) inches below ground surface prior to use of the probe. The vane shear (attached to a metal rod) will be pushed to the testing depth by hand, and the mechanism will be rotated at a slow, constant rate (6 to 12 degrees of rotation per minute) using a torque wrench. Once maximum torque has been reached, the shear vane will be rotated quickly to calculate remolded shear strength.

A soil properties and geotechnical analysis will be conducted for both drilled and hand augered areas of the landfill and documented on field log forms for later boring log preparation, including:

- Field work includes logging:
 - o Soil type,
 - o Color,
 - Moisture content,
 - o Presence of contamination.
 - o Presence of waste, and
 - o Grain size distribution.
- Sample depths and interval and depth to water will also be entered in field log forms for later boring log preparation.
- Soil samples from drilled borings are collected using standard penetration testing methodology, this technique also used to measure soil density.
- Soil samples from hand auger borings will undergo hand-held vane shear probe to evaluate soil shear strength.
- Soil samples collected from drilled and hand auger borings will be submitted for laboratory analysis:
 - Moisture content.
 - o Grain size,
 - o In-situ dry density,
 - o Fines content,
 - o Atterberg limits,
 - o Triaxial compressive strength, and
 - One-dimension consolidation and direct shear.

IAA No. C2200079

Entity Name: Town of Eatonville

• Field and laboratory data will be used to conduct an engineering analysis and modeling to assess the ground structural stability (landslide potential) to support the feasibility study evaluations and a future remedial action.

<u>Sub-Task 3.2 Deliverables (to be incorporated into the remedial investigation report due ninety days following remedial investigation completion):</u>

- 1. Field log forms,
- 2. Boring and gas probe locations figure,
- 3. Email updates to ECOLOGY Site Manager, TOWN and Weyerhaeuser on the following:
 - a. Borings completed,
 - b. Landfill gas readings,
 - c. Potential areas for hollow stem auger boring locations, and
 - d. Potential or confirmed archaeologic discoveries.
- 4. Boring logs,
- 5. Laboratory analytical reports, and
- 6. Archeologic field log(s) if applicable.

<u>Sub-Task 3.3: Source and Contaminant Characterization – Hand Augered Soil/Sediment Borings</u> To assess the contaminants of potential concern in the wetland area, shallow soil/wetland sediment samples will be collected along three (3) parallel transacts. Each transact spans the landfill width perpendicular to

will be collected along three (3) parallel transects. Each transect spans the landfill width perpendicular to the landfill axis and are approximately fifty (50) feet apart. The first transect starts at the landfill base and the next transects are farther out from that. Five (5) soil subsamples will be collected at an equal spacing along each transect (pre-located on Real Time Kinematic-Global Positioning System) and be composited into one (1) sample from each transect. The target subsample depth is 0 to 1 foot below ground surface, but may be adjusted based on field conditions. The five (5) subsamples will be collected and homogenized in a decontaminated stainless-steel bowl to form one (1) primary sample from each transect.

The surface soil subsamples will be manually collected using a 3 to 4-inch diameter hand auger as motorized drilling equipment is unable to access the base of the landfill. Each hand auger subsample location will be logged in accordance with the Unified Soil Classification System and recorded on field log form. Ground conditions along each transect will be logged including areas with considerable vegetation. If obstructions are encountered during sampling, new sample locations will be selected as close to those proposed on the Real Time Kinematic-Global Positioning System to ensure representative soil samples are collected. Excess soil from the soil core will be placed back into the ground at the point of collection.

All digging and sample collection equipment, including the auger and stainless steel spoons, will be decontaminated between each sub-sample collection location. Additional and alternative hand sampling tools will be available during sampling, as backup alternatives if needed.

Three (3) primary samples will be collected during each sampling event and analyzed for the following:

- Semi-volatile organic compounds,
- Volatile organic compounds,
- Polychlorinated biphenyls,
- Polycyclic aromatic hydrocarbons,
- Total petroleum hydrocarbons,
 - o Extractable petroleum hydrocarbon,
 - o Volatile petroleum hydrocarbons,
- Total organic carbon, and

IAA No. C2200079

Entity Name: Town of Eatonville

- Metals (totals for soil and totals and dissolved for liquid):
 - o Arsenic,
 - o Barium,
 - o Beryllium,
 - o Cadmium.
 - o Chromium (III and VI),
 - o Cobalt,
 - o Copper,
 - o Lead,
 - o Nickel,
 - o Selenium,
 - o Silver,
 - o Thallium,
 - o Vanadium, and
 - o Zinc.

<u>Sub-Task 3.3 Deliverables (to be incorporated into the remedial investigation report due ninety days following remedial investigation completion):</u>

- 1. Field log forms,
- 2. Boring locations figure,
- 3. Email updates on borings completed,
- 4. Boring logs,
- 5. Archeologic field log(s) if applicable, and
- 6. Laboratory analytical reports.

Sub-Task 3.4: Source and Contaminant Characterization – Landfill Cover Soils

The cover soil over the landfill prism will be characterized for contaminants of potential concern. Sample locations are not pre-selected using the Real Time Kinematic-Global Positioning System as cover material is not uniform and each sample location needs to be determined in the field. Actual sample locations will be recorded by the Real Time Kinematic-Global Positioning System.

Cover sampling involves Incremental Sampling Methodology, a structured composite sampling protocol that provides the following:

- Reduction in data variability,
- Increases sample representativeness, and
- Reduces the chance of missing significant contamination in a volume of soil targeted for sampling (ITRC, 2020).

Incremental Sampling Methodology characterizes the average contaminants of potential concern concentrations within a predefined area called a decision unit. The decision unit defines the area and depth of sampling upon which risk decisions can be based. A second decision unit for the cover material will be the soil from the borrow pit located north and across the access road from the landfill where soil was initially excavated to use for landfill cover.

To conduct Incremental Sampling Methodology sampling, numerous samples of soil (each called an increment) are collected and combined, homogenized in a laboratory, and the homogenized sample is then subsampled according to specific protocols. The decision unit for this event will be planned for a minimum of fifty (50) increments but actual increments will be based on access. At least thirty (30) increments must be collected. The target depth for each subsample is 0 to 6 inches below ground surface. The incremental

Entity Name: Town of Eatonville

soil samples will be collected using a small-diameter (1- to 2-inch diameter) stainless steel push tube shaped sampling device, a decontaminated stainless steel trowel or small shovel, or decontaminated 3- to 4-inch hand auger.

At each incremental location, after removal of surface vegetation, soil from the top six (6) inches measured using a scale to achieve a target mass of approximately one-hundred (100) grams per subsample. The material will then be placed into a large labeled, laboratory pre-cleaned 1-gallon glass sample container. Significant root vegetation mass, and most gravel, will be removed from the subsample. However, degraded or fine organic materials are acceptable for collection. All increments from each decision unit will be placed into a single sample container provided by the laboratory and will be homogenized and processed at the laboratory. When processing the Incremental Sampling Methodology samples, the laboratory will use the entire sample volume from each decision unit (i.e., 30 or more incremental subsamples) to create a composited, homogenized sample. The Incremental Sampling Methodology sample for each decision unit will be processed following the procedures of using standardized 2-dimensional Japanese Slab-Cake procedures.

Fifty (50) increments will be attempted to be collected, however a minimum of thirty (30) are required. Three (3) Incremental Sampling Methodology samples will be collected during each sampling event and be analyzed for the following:

- Semi-volatile organic compounds,
- Volatile organic compounds,
- Polychlorinated biphenyls,
- Polycyclic aromatic hydrocarbons,
- Total petroleum hydrocarbons.
 - o Extractable petroleum hydrocarbon, and
 - Volatile petroleum hydrocarbons.
- Total organic carbon, and
- Metals (totals for soil and totals and dissolved in liquid):
 - o Antimony,
 - o Arsenic,
 - o Beryllium,
 - Cadmium,
 - o Chromium [III and VI],
 - o Copper,
 - o Lead,
 - o Mercury,
 - o Nickel.
 - o Selenium,
 - o Gold,
 - o Thallium, and
 - o Zinc.

Entity Name: Town of Eatonville

<u>Sub-Task 3.4 Deliverables (to be incorporated into the remedial investigation report due ninety days following remedial investigation completion):</u>

- 1. Field log forms,
- 2. Boring locations figure,
- 3. Email updates on borings completed,
- 4. Boring logs,
- 5. Laboratory analytical reports, and
- 6. Archeologic field log(s) if applicable.

<u>Sub-Task 3.5: Source and Contaminant Characterization – Drilled Groundwater Monitoring</u> Well(s) Installation/Gradient/Sampling

At a minimum, four (4) groundwater monitoring wells (two upgradient and two downgradient of the landfill prism) will be installed. Wells will be installed for evaluating groundwater gradient and groundwater quality. All groundwater monitoring wells will be installed such that they be can maintained and kept in place for a minimum of two (2) sampling events (one dry season sampling event and one wet season sampling event).

The two (2) upgradient (upper landfill) groundwater monitoring wells will be located along the landfill access road adjacent to the top of the landfill. They will be installed in locations where refuse is not encountered to characterize incoming groundwater near the landfill. These wells will be drilled and completed using a hollow stem auger drill rig to a depth of five (5) feet beyond competent groundwater. If possible, based on drilling conditions, at least one (1) borehole will be drilled eighty (80) to one-hundred (100) feet below ground surface regardless of initial depth to competent water, or until meeting refusal, to characterize the lithological extent at the top of the slope. Split-spoon sampling will be performed following ASTM D 1586 (ASTM International, 2018) standards to determine soil geotechnical properties and collect disturbed soil samples using the standard penetration testing split-spoon barrel sampler (1.4-inch inner diameter and 2-inch outer diameter).

The sampler will be advanced to a depth of eighteen (18) inches using a 140-pound steel hammer falling thirty (30) inches and operated by a semi-automatic trip-hammer, as defined in the ASTM International guidance. Blow counts will be recorded as the number of blows required for each successive 6-inch penetration interval, and the penetration resistance (blows/feet) will be recorded as the number of blows required to drive the final twelve (12) inches of depth. Standard penetration testing N-values will also be obtained. These values and associated characteristics (hardness, stability, and lithological profiles) will be notated on a field log form.

Split-spoon sampling intervals will be defined in the field by the geotechnical engineer but sampling will be performed at no less than every five (5) feet. Samples will be logged for physical properties using a field form in accordance with the Unified Soil Classification System, labeled, sealed, and transported to a laboratory for geotechnical testing. If multiple sample types are visually identified within a single standard penetration testing drive sample, the samples will be split, labeled, and analyzed independently. If possible, up to three additional hollow stem auger drilled soil borings will be advanced through the landfill.

The landfill groundwater gradient will be determined from depth to groundwater measurements taken from the newly installed groundwater monitoring wells at the upper portion of the landfill and those installed in the wetland area. Water level depths will be measured from surveyed marked point at the well casing top. Groundwater elevation levels and well pore volumes will be calculated from those depths to water measurements. If possible, a licensed surveying company will tie well casing top elevations to the 1988 North American Vertical Datum. Otherwise, ground surface elevations will be estimated from LiDAR

Entity Name: Town of Eatonville

surveys. The height of the each well pipe will be measured from the ground surface to the nearest hundredth of a foot and recorded on field log form. Depth to groundwater measurements will be taken from each well before sampling and on the same day within a short time period and recorded on field log forms.

Groundwater will be sampled approximately one day (24 hours) after well installation to allow solids to settle to achieve low turbidity in samples. Well purging will be done before sampling by inserting dedicated tubing into the well screen center. Water will be withdrawn using a peristaltic pump at a flow rate of approximately two-hundred and fifty (250) milliliters per minute and depth to water will continually be monitored to not draw down the water level in the well.

Field parameters will be collected using a YSI multi-parameter direct reading field instrument connected via purge tubing to a flow-through cell. Parameters collected in the field will be entered on a field log form. These values will be monitored at approximately 5-minute intervals and recorded on the field form.

The YSI direct reading instrument will be calibrated at the beginning of each field day when samples are collected. Calibration specifications will be recorded in the field log forms. For each sample location, field parameters will be collected by either submerging the decontaminated YSI direct reading instrument directly into water at the sample location or by using the peristaltic pump and a flow-through cell for parameter collection.

A YSI direct read instrument will be used to collect field parameters readings, including:

- pH.
- Dissolved oxygen,
- Temperature,
- Conductivity, and
- Oxygen-reduction potential.

Purging is considered complete when field parameters have stabilized and water level drawdown is controlled in accordance with U.S. Environmental Protection Agency low-flow purging and sampling procedures (EPA, 2017). If these conditions are not met, purging is considered complete when the following sequencing takes place:

- 1. A minimum of three (3) well volumes has been removed and successive field parameter measurements agree with the stability criteria based on three consecutive measurements taken five (5) minutes apart.
- 2. At least five well volumes have been removed (even if field parameter stabilization criteria cannot be attained.
- 3. The well has been pumped dry and allowed to recover sufficiently such that adequate sample volumes can be collected within twenty-four (24) hours of the initial well purging.

Final field parameters will be collected and purge tubing removed from the flow-through the cell prior to collecting groundwater sample directly from purge tubing. Purge water will be drummed and a representative sample(s) collected to determine if disposal off-site is required. If determined to be non-hazardous, water will be left on-site; if determined to be hazardous, purge water will be disposed of at the nearest publically owned water treatment facility.

IAA No. C2200079

Entity Name: Town of Eatonville

Two (2) groundwater samples will be collected during each sampling event and be analyzed for the following:

- Semi-volatile organic compounds,
- Volatile organic compounds,
- Polybrominated diphenyl ethers by gas chromatography/mass spectrometry select ion method
- Polychlorinated biphenyls,
- Polycyclic aromatic hydrocarbons,
- Total petroleum hydrocarbons.
 - o Extractable petroleum hydrocarbon, and
 - o Volatile petroleum hydrocarbons.
- Total organic carbon, and
- Metals (totals and dissolved):
 - o Arsenic,
 - o Barium,
 - o Beryllium,
 - o Cadmium,
 - o Chromium (III and VI),
 - o Cobalt,
 - o Copper,
 - o Lead,
 - o Nickel,
 - o Selenium,
 - o Silver,
 - o Thallium,
 - o Vanadium, and
 - o Zinc.

<u>Sub-Task 3.5 Deliverables (to be incorporated into the remedial investigation report due ninety days following remedial investigation completion):</u>

- 1. Field log forms,
- 2. Boring locations figure,
- 3. Email updates on borings completed,
- 4. Boring logs,
- 5. Laboratory analytical reports, and
- 6. Archeologic field log(s) if applicable.

<u>Sub-Task 3.6: Source and Contaminant Characterization – Hand Augered Groundwater</u> Monitoring Well(s) Installation/Sampling

Two downgradient wells (wetland area) will be drilled by hand auger and set in place by hand. A temporary well borehole will be created using a decontaminated post hole digger and/or shovel and hand auger. Then, a decontaminated temporary pre-packed push-in well screen (1.25-inch x 14-inch stainless steel piezometer) and pipe will be placed in the borehole. Clean sand will be used as backfill in the boring and will be placed to a minimum of one (1) foot above the screened zone and the remainder of the annular space shall be filled with a bentonite grout or hydrated chips to the ground surface. Soil cuttings will be placed on the ground. Flush mount or above ground security casings will not be installed over the wetland area wells as these are not anticipated to be in place for an extended period and in a remote area.

The landfill groundwater gradient will be determined from depth to groundwater measurements taken from the newly installed groundwater monitoring wells at the upper portion of the landfill and these wells. Water

Entity Name: Town of Eatonville

level depths will be measured from surveyed marked point at the well casing top. Groundwater elevation levels and well volumes will be calculated from depth to water measurement. If possible, a licensed surveying company will tie well casing top elevations to the 1988 North American Vertical Datum. Otherwise, ground surface elevations will be estimated from LiDAR surveys. The height of the each well pipe will be measured from the ground surface to the nearest hundredth of a foot and recorded on the field log form. Depth to groundwater measurements will be taken from the hand augered wells before sampling and on the same day within a short time period and recorded on field log forms.

Groundwater will be sampled approximately one day (24 hours) after well installation to allow solids to settle to achieve low turbidity in samples. Well purging will be done before sampling by inserting dedicated tubing into the well screen center. Water will be withdrawn using a peristaltic pump at a flow rate of approximately two-hundred and fifty (250) milliliters per minute and depth to water will continually be monitored to not draw down the water level in the well.

Field parameters will be collected using a YSI multi-parameter direct reading field instrument connected via purge tubing to a flow-through cell. Parameters collected in the field will be entered on a field log form. These values will be monitored at approximately 5-minute intervals and recorded on the field form. The YSI direct reading instrument will be calibrated at the beginning of each field day when samples are collected. Calibration specifications will be recorded in the field log forms. For each sample location, field parameters will be collected by either submerging the decontaminated YSI direct reading instrument directly into water at the sample location or by using the peristaltic pump and a flow-through cell for parameter collection.

A YSI direct read instrument will be used to collect field parameters readings, including:

- pH,
- Dissolved oxygen,
- Temperature,
- Conductivity, and
- Oxygen-reduction potential.

Purging is considered complete when field parameters have stabilized and water level drawdown is controlled in accordance with U.S. Environmental Protection Agency low-flow purging and sampling procedures (EPA, 2017). If these conditions are not met, purging is considered complete when the following sequencing takes place:

- 1. A minimum of three (3) well volumes has been removed and successive field parameter measurements agree with the stability criteria based on three consecutive measurements taken five (5) minutes apart.
- 2. At least five well volumes have been removed (even if field parameter stabilization criteria cannot be attained.
- 3. The well has been pumped dry and allowed to recover sufficiently such that adequate sample volumes can be collected within twenty-four (24) hours of the initial well purging.

Final field parameters will be collected and purge tubing removed from the flow-through the cell prior to collecting groundwater sample directly from purge tubing. Purge water can be placed in a bucket with lid and a representative sample(s) collected to determine if disposal off-site is required. If determined to be non-hazardous, water will be left on-site, if determined to be hazardous, purge water will be disposed of at the nearest publicly owned water treatment facility.

IAA No. C2200079

Entity Name: Town of Eatonville

Groundwater will be sampled approximately one day (24 hours) after well installation to allow solids to settle to achieve low turbidity in samples. Two (2) groundwater samples will be collected during each sampling event and be analyzed for the following:

- Semi-volatile organic compounds,
- Volatile organic compounds,
- Polybrominated Diphenyl Ethers by Gas Chromatography/Mass Spectrometry Select Ion Method,
- Polychlorinated biphenyls,
- Polycyclic aromatic hydrocarbons,
- Total petroleum hydrocarbons,
 - o Extractable petroleum hydrocarbon,
 - Volatile petroleum hydrocarbons,
- Total organic carbon, and
- Metals (totals and dissolved in liquid):
 - o Arsenic,
 - o Barium.
 - o Beryllium,
 - o Cadmium,
 - o Chromium (III and VI),
 - o Cobalt,
 - o Copper,
 - o Lead,
 - o Nickel,
 - o Selenium,
 - o Silver,
 - o Thallium,
 - o Vanadium, and
 - o Zinc.

<u>Sub-Task 3.6 Deliverables (to be incorporated into the remedial investigation report due ninety days following remedial investigation completion):</u>

- 1. Field log forms,
- 2. Boring locations figure,
- 3. Email updates on borings completed,
- 4. Boring logs,
- 5. Laboratory analytical reports, and
- 6. Archeologic field log(s) if applicable.

<u>Sub-Task 3.7: Source and Contaminant Characterization – Surface Water Sampling (Seeps and Springs) and Sediment</u>

At a minimum, surface water locations sampled in January 2021 will be resampled. Other surface water samples will be collected from all seeps or springs daylighting within the wetland area. Minimal equipment is anticipated to be required for collecting the samples. Due to the dry weather conditions, sampling seeps may require digging a shallow pit to enable effective sample collection. If sample is obtained by digging a pit to concentrate the water, adequate time will be allowed prior to sample collection to reduce the turbidity/total solids content of the sample.

If seeps are easily accessed, bottles will be filled by decanting from a decontaminated scoop. During sample collection the sample bottle outside will not come in contact with water being sampled. If digging is required to access seeps, a peristaltic pump will be used to transfer samples into bottles, ideally collecting water

IAA No. C2200079

Entity Name: Town of Eatonville

from the center of the water column containing low suspended solids/turbidity (as determined by visual observation). To decrease potential turbidity care will be exercised to minimize disturbance to the surrounding sample area or pit while collecting samples. Where a bottle cannot easily be placed under the points of flow, a peristatic pump and disposable tubing will be used to collect low-flow samples.

A YSI direct reading instrument will be used to collect field parameters in conjunction with seep sample collection for the following parameters:

- pH,
- Dissolved oxygen,
- Temperature,
- Conductivity, and
- Oxygen-reduction potential.

One (1) sediment sample will be collected from flowing water exiting the wetland area or as close as possible to that area. The goal being to sample sediment from the stream that discharges to the Mashel River. A decontaminated hand-auger, trowel or push tube will be used for sample collection.

The number of seeps or standing water is unknown so the number of samples can only be estimated, at least three (3) samples is expected and one (1) sediment sample will be collected during each sampling event and be analyzed for the following:

- Semi-volatile organic compounds,
- Volatile organic compounds,
- Polybrominated diphenyl ethers by gas chromatography/mass spectrometry select ion method,
- Polychlorinated biphenyls,
- Polycyclic aromatic hydrocarbons,
- Total petroleum hydrocarbons.
 - o Extractable petroleum hydrocarbon, and
 - Volatile petroleum hydrocarbons.
- Total organic carbon, and
- Metals (totals and dissolved in liquid):
 - o Arsenic.
 - o Barium,
 - o Beryllium,
 - o Cadmium,
 - Chromium (III and VI),
 - o Cobalt,
 - o Copper,
 - o Lead,
 - o Nickel.
 - o Selenium,
 - o Silver,
 - o Thallium,
 - o Vanadium, and
 - o Zinc.

IAA No. C2200079

Entity Name: Town of Eatonville

<u>Sub-Task 3.7 Deliverables (to be incorporated into the remedial investigation report due ninety days following remedial investigation completion):</u>

- 1. Field log forms,
- 2. Boring locations figure,
- 3. Email updates on borings completed,
- 4. Boring logs,
- 5. Laboratory analytical reports, and
- 6. Archeologic field log(s) if applicable.

Task 4 – Remedial Investigation Report

A remedial investigation report will be completed in accordance with WAC 173-340-350. Results of the remedial investigation (Task 3) activities coupled with the historical data will be presented in a Draft Remedial Investigation and will be subject to public review and comment.

The remedial investigation and feasibility study report will include the following elements:

- Background Information.
 - o Site history, and
 - o Information from previous site investigations.
- Nature and Extent of Contamination the Contractor will prepare a description and assessment of the degree and extent of contamination. This must include:
 - o Data analysis:
 - Analyze all data collected during Tasks 2 through 4, and
 - Prepare supporting figures and tables.
 - Conceptual Site Model:
 - Discuss:
 - > Contaminant release,
 - Fate and transport,
 - Exposure pathways, and
 - > Potential receptors.
 - Lab reports,
 - o Information from previous investigations,
 - Well boring logs,
 - o Test pit logs, and
 - o Any other documentation of site characterization activities.
- Applicable or Relevant and Appropriate Requirements Analysis:
 - o Identify applicable:
 - Local,
 - State, and
 - Federal laws for cleanup of the site in accordance with WAC 173-340-710.
- Cleanup Levels/Risk Assessment Analysis
 - Final cleanup levels and points of compliance will be generated by ECOLOGY;
 - The remedial investigation report should incorporate these values and provide a general discussion of why the cleanup levels and points of compliance are appropriate for the site based on site location.
 - The remedial investigation report should discuss projected future use.
 - The remedial investigation report should discuss contaminant concentrations.
 - The remedial investigation report should also include any risk assessment information generated by ECOLOGY.

IAA No. C2200079

Entity Name: Town of Eatonville

- Discussion of remedial investigation data
 - o Interpret and discuss data to determine the nature and extent of the contamination and to support final cleanup recommendations for the site.
 - o Include a summary of all possible and suspected source areas of contamination based on the data collected.
- Discuss any known or potential risks to public health and the environment.

Task 4 Deliverables:

- 1. Ecology Review Draft Remedial Investigation Report, including:
 - a. Any archaeological findings,
 - b. Daily field logs,
 - c. Analytical reports, and
 - d. Figures and tables.
 - e. This deliverable is due for ECOLOGY review ninety (90) calendar days following completion of remedial investigation activities and will include all of the deliverables outlined above for all sub-tasks of task 3.
 - f. ECOLOGY will provide their comments to this version of the Ecology Review Draft Remedial Investigation Report within forty-five (45) calendar days following receipt.
- 2. Public Review Ready Draft Remedial Investigation Report, including all of the elements as outlined in #1 above and ECOLOGY's comments on the draft version is due for ECOLOGY review sixty (60) calendar days following submittal of ECOLOGY's comments on #1 above.

Note: The Public Review Ready Draft Remedial Investigation and Feasibility Study Reports will go out for public comment for thirty-days (30) minimum. The Agreed Order does not provide a schedule on when the public comment period should start. ECOLOGY will provide a response to comments received during the public comment period, if any provided. ECOLOGY will approve the Public Review Ready Draft Remedial Investigation and Feasibility Study document. The Agreed Order does not provide a schedule for approving the Public Review Ready Draft Remedial Investigation and Feasibility Study document.

Task 5 – Feasibility Study and Report

A feasibility study will be conducted following the completion of the task 3 remedial investigation activities and incorporate any and all historical or previous assessment information to determine the best potential cleanup methods to present to ECOLOGY for consideration.

The following will be performed as part of the feasibility study:

- Conduct technology screening and evaluation sufficient to develop site-specific cleanup action alternatives.
- Propose cleanup action alternatives and perform a disproportionate cost analysis on said alternatives.
- Present a preferred cleanup action based on site-specific information.

Task 5 Deliverables:

- 1. Ecology Review Draft Feasibility Study Report, including:
 - a. Technology screening and evaluation,
 - b. Proposal of cleanup action alternatives,
 - c. A disproportionate cost analysis, and
 - d. Presentation of a preferred cleanup action.

IAA No. C2200079

Entity Name: Town of Eatonville

- e. This deliverable is due to ECOLOGY for review one-hundred twenty (120) calendar days following ECOLOGY's approval of the Public Review Ready Draft Remedial Investigation Report.
- f. ECOLOGY will provide their comments to the Ecology Review Draft Feasibility Study Report within forty-five (45) calendar days following receipt.
- 2. Public Review Ready Draft Feasibility Study Report, including all of the elements as outlined in #1 above and ECOLOGY's comments on the draft version is due for ECOLOGY review sixty (60) calendar days following submittal of ECOLOGY's comments on #1 above.

Note: The Public Review Ready Draft Remedial Investigation and Feasibility Study Reports will go out for public comment for thirty-days (30) minimum. The Agreed Order does not provide a schedule on when the public comment period should start. ECOLOGY will provide a response to comments received during the public comment period, if any provided. ECOLOGY will approve the Public Review Ready Draft Remedial Investigation and Feasibility Study document. The Agreed Order does not provide a schedule for approving the Public Review Ready Draft Remedial Investigation and Feasibility Study document.

Task 6 – Preliminary Draft Cleanup Action Plan

A Preliminary Draft Cleanup Action Plan will be submitted to ECOLOGY after the Public Review Ready Remedial Investigation and Feasibility Study document has been approved by ECOLOGY.

The preliminary draft cleanup action plan will include the following:

- General description of the proposed cleanup action.
- Summary of the rationale for selecting the proposed cleanup action.
- Summary of other cleanup action alternatives evaluated.
- Identifies site-specific cleanup levels and points of compliance for each hazardous substance and medium of concern for the proposed cleanup action.
- Identifies applicable state and federal laws for the proposed cleanup action.
- Institutional controls, if any, required as part of the proposed cleanup action.
- Identifies residual contamination remaining on the site after cleanup and restrictions on future uses and activities at the site to ensure continued protection of human health and the environment.
- A preliminary determination by the Ecology that the proposed cleanup action will comply with Washington Administrative Code 173-340-360.
- Discusses compliance monitoring requirements.
- Presents the schedule for implementing the CAP and if known, restoration timeframe.

Task 6 Deliverable:

1. Preliminary Draft Cleanup Action Plan is due ECOLOGY ninety (90) calendar days following ECOLOGY's approval of the Public Review Remedial Investigation and Feasibility Study Reports.

Note: Following ECOLOGY's receipt of the Preliminary Draft Cleanup Action Plan and when it has been determined by both ECOLOGY and the Attorney General's Office that obligations of Agreed Order 20072 have been met, ECOLOGY will provide to the Town of Eatonville and Weyerhaeuser a Notice of Completion Letter indicating such. The Agreed Order does not provide a schedule for providing a Notice of Completion Letter. The Interagency Agreement ends with submittal of the Satisfaction Letter on or prior to June 30, 2023, whichever comes first.

Entity Name: Town of Eatonville

Budget:

Task	Description	Amount
1	Prepare a Remedial Investigation Work Plan	20,200.00
2	Site Reconnaissance	3,500.00
3	Remedial Investigation	127,200.00
4	Remedial Investigation Report	92,800.00
5	Feasibility Study and Report	79,200.00
6	Preliminary Draft Cleanup Action Plan	34,100.00
	Total Project Cost	357,000.00

Overall Budget Table Note: Task budgets may be moved between tasks without formal amendment.

Entity Name: Town of Eatonville

APPENDIX B

SPECIAL TERMS AND CONDITIONS

- 1) Retroactive Cost Reimbursement Reference is Agreed Order DE 20072
 - a) TOWN may request for retroactive cost(s) reimbursement associated with this agreement prior to ECOLOGY's signature date.
 - I. Start date that is approved for retroactive costs is March 1, 2021.