



THE STATE  
of ALASKA  
GOVERNOR MICHAEL J. DUNLEAVY

Department of Environmental  
Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE  
Contaminated Sites Program  
P.O. Box 111800  
Juneau, Alaska 99811-1800  
Main: 907.465.5250  
Fax: 907.465.5245  
www.dec.alaska

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*Transmitted via email*

Dave Spokely  
Power Systems & Supplies of Alaska  
P.O. Box 772  
Ward Cove, Alaska 99928

Re: Report of 5-Year Review Site Inspection and Institutional Controls verification for KPC Ward Cove Pulp Mill site

Dear Mr. Spokely:

The purpose of this letter is two-fold. One, it serves to document DEC's site inspection conducted July 25, 2019 in conjunction with EPA for the periodic review of institutional controls for the former KPC Ward Cove Pulp Mill Site. A physical inspection is conducted every five years and is part of the Five-Year Review requirement under CERCLA and the Record of Decision for the site. The inspection serves to provide information about the current status and uses of the site for EPA to consider in completing the Five Year Review. Secondly, this letter summarizes proposed development activities that you have described to us and provides clarification of the institutional controls currently in place, along with notification procedures.

The Ward Cove property is located at Mile 7.5 North Tongass Highway north of Ketchikan. The site consists of two CERCLA designated areas: the Uplands Operable Unit (Uplands OU) and the Marine Operable Unit (Marine OU). The July 2019 five-year review inspection covered the three main areas of the Uplands OU: Connell Lake, Dam and Pipeline; the closed wood waste landfill under KPC management; and the former mill area. In addition, the development and infrastructure along the shoreline and the AMHS property were inspected. The submerged portion of the Marine OU consists of the entire cove including the Area of Concern where the most significant impacts to the marine environment were documented, but beyond visual inspection from the shore, this area was not part of the inspection. During the site inspection, EPA and DEC Contaminated Sites Program staff were accompanied by representatives of Power Systems & Supplies of Alaska (PSSA), Ketchikan Pulp Company (KPC), and ADOT&PF/AMHS.

### **Background**

At the time of closure, soil, marine sediment, and groundwater contamination remained at levels that require use restrictions for the upland property and in the cove. As far as DEC is aware, both the Marine OU and the Uplands OU are subject to institutional controls (ICs) established and enforced under a

2004 conservation easement and restrictive covenant signed by KPC and the Ketchikan Gateway Borough (KGB), a 2000 Consent Decree entered into by Ketchikan Pulp Company, Louisiana Pacific Corporation, and Gateway Forest Products and/or a 1999 Environmental Protection Easement and Declaration of Restrictive Covenants entered into between Ketchikan Pulp Company and the State of Alaska. These documents and their various restrictions run with the land and apply to all subsequent owners, successors and assigns. Current owners at the site are KPC, PSSA, and ADOT&PF/AMHS. KPC owns the landfill; PSSA owns the upland pulp mill site and a majority of the cove; and ADOT&PF owns a portion of the upland and a small portion of the cove. PSSA leases its property to Ward Cove Industries LLC.

### **Uplands OU Inspection**

Conditions observed during the inspection of the various areas of the Uplands OU are discussed below. Institutional control requirements as detailed in the 2000 Institutional Controls Plan (Appendix C of the 2000 Consent Decree) for the Uplands OU consist of the following:

- Maintain acceptable risk levels for soils for industrial/commercial exposure scenarios;
- Comply with requirements identified in the *Management Plan for Arsenic in Rock and Soil* to reduce exposure to arsenic in soil and rock;
- Restrict residential land use (or similar non-industrial/commercial land use resulting in around the clock residence by people or daily use by children);
- Prohibit drilling of water wells and use of groundwater;
- Identify and address source areas (if any) during demolition and excavation activities using applicable or relevant and appropriate requirements such as current risk-based concentrations or standards and criteria; and
- Properly characterize and manage soils from the near-shore fill subarea or underneath paved areas or structures and from other locations not evaluated or characterized in the remedial investigation if those soils are excavated or exposed.

In addition, under state law, a person shall provide written notice to the department of any proposal to use the site in a manner that is inconsistent with a restrictive covenant or easement (18 AAC 75.375) and shall obtain approval before moving or disposing of soil subject to the site cleanup rules (18 AAC 75.370(b)).

### Connell Lake, Dam, and Pipeline

Connell Lake is located about three miles east of Ward Cove. A large dam at Connell Lake (man-made) and the four-foot diameter pipeline supplied water to the former mill and now serve as a water source for fire prevention for the North Tongass Fire and Emergency Medical Services (EMS) Area and a sewage treatment plant on the former mill property. The habitat along the pipeline is heavily forested and since the pipeline is gravity fed, the general gradient is downward towards Ward Cove.

The wood stave pipeline built in 1954 still functions and runs from the Connell Lake Dam to Ward Cove. Water flows continuously through the pipeline at a rate of 49 million gallons per day, which helps to preserve its integrity. The water is currently used for wastewater treatment and fire hydrant water supply. The pipeline and adjacent service road are maintained yearly when the pipe is checked for integrity and the vegetation is cleared on both sides of the pipeline.

The pipeline, dam, and lake are zoned for recreational use, and the pipeline service road is also designated as a recreational foot trail by the United States Forest Service. The area sees up to 100 visitors per day during the tourist season, both pedestrians and bike riders. Vehicle access by the public is also allowed, but the dam itself is gated therefore not accessible to public use. This area is subject to the 2000 Institutional Controls plan because contamination from poly-chlorinated biphenyls (PCBs) was left in place in three areas along the pipeline road at levels above the residential soil cleanup level of 1.0 mg/kg, and lead was left in one area at levels as high as 2,300 mg/kg, in excess of both residential and commercial cleanup levels for lead. Levels of these contaminants remaining along the pipeline road have been deemed suitable for commercial/industrial and recreational uses only. At the time of the inspection, DEC finds that the current recreational use of the area and limited access are consistent with the institutional controls for the Upland OU.

#### Wood Waste and Ash Disposal Landfill

The landfill portion of the inspection was led by Phil Benning of KPC and Barry Hogarty of Technical Environmental Services, KPC's consultant. The closed landfill and leachate lagoon are continuously managed by KPC. The landfill contains wood waste and ash from mill operations removed from various locations in the Upland OU and dredged spoils from the Marine OU. In addition to any other requirements, the landfill is subject to post-closure monitoring under the DEC Solid Waste Program. The landfill is continuously maintained and mowed in order to control the vegetation and to discourage large tree growth which could damage the landfill membrane cap. The grass covering the landfill is well established and well maintained. Leachate from the landfill is collected in a geomembrane lined lagoon. The leachate treatment system consists of a settling pond with aerators. Currently the aerators do not run since the leachate flow has slowed down. The pond seeps into a thriving, constructed wetland that has an abundance of amphibians. The leachate discharges into an area in the woods adjacent to the wetland and is subject to an Alaska Pollutant Discharge Elimination System permit issued by the DEC Division of Water Quality. DEC found that the current use and status of the closed landfill remains consistent with the institutional controls for the Upland OU.

#### ADOT&PF/AMHS property

The AMHS property is located on the northeastern edge of Ward Cove. We briefly toured this property which will be used as a future dock and berthing facility and is referred to as the "Ward Cove Marine Facility." In February 2019, AMHS adjusted their lot line in a land exchange for submerged lands with PSSA in order to construct the vessel maintenance facility outside of the sand capped areas and partially outside of the Area of Concern. Prior to construction there may be a need to remove a high point at Bolles Ledge which is in the Area of Concern. At the time of the inspection, DEC found that the current use of the AMHS property is consistent with the institutional controls for the Upland OU.

#### Former mill area

Contaminants of concern identified at the former mill site were arsenic, lead, polycyclic aromatic hydrocarbons (PAHs), PCBs, and petroleum hydrocarbons. Areas where unacceptable risk levels were present (cancer risks  $> 1$  in 10,000 or  $1 \times 10^{-4}$ ) and other areas were remediated in accessible surface soils (those not covered by buildings) to levels that are acceptable for a commercial industrial exposure use ( $< 1 \times 10^{-4}$ ). In addition, elevated concentrations of arsenic are present throughout the mill area in excess of 50 mg/kg.

There has not been any new building construction since the mill closure. The only remaining buildings are named Warehouse #1 (Lower brick building), Warehouse #2 (other brick building), Warehouse #3

(yellow metal building), the Roll Building, and the Administration Building. There are currently some tenants in the remaining structures, but most of the lease spaces are and will remain vacant to accommodate future development plans. All concrete foundations and roads associated with the former mill have been left in place. Based on discussions with you during the site inspection, Ward Cove Industries has no current plans to remove foundations or asphalt or concrete surfaces. During the site visit, an area off the road that leads down into the former pulp mill area was observed to be heavily disturbed and full of debris and overburden. Based on information from you provided on November 1, 2019, this area of the property was previously known as the Wood Room, where log bundles removed from the cove with a bundle crane were stored. The crane itself was removed at the time the mill was closed. The remaining infrastructure was taken down by a prior owner of the property, in 2008 or 2009. The site owner at the time demolished building but left the foundation slab intact along with large piles of brick rubble and a mound of debris which was observed during the site inspection. Since PSSA purchased the property, the area has been left undisturbed and has gradually revegetated.

Over the past summer, PSSA has consolidated the brick rubble into organized piles, which are situated on existing concrete slabs. No foundations have been removed or new ground surface exposed. The alders that have grown on both the brick rubble piles and the soils have been pulled out and placed in a pile for burning. No soil has been excavated or removed from the area.

DEC found that the current use and status of the former mill area remains consistent with the institutional controls for the Upland OU.

### **Marine OU Inspection**

The inspection of the Marine OU was limited to the shoreline of the former mill area as a visual inspection of the seafloor of Ward Cove is beyond the scope of this 5-year review.

As described in the 2002 *Addendum to the Long-term Monitoring and Reporting Plan for Sediment Remediation in Ward Cove*, for any circumstances that are deemed to violate the institutional controls in the 2000 Consent Decree that could materially damage (e.g., erode or displace) any portion of the AOC that has a sediment cap, the following actions must be taken:

- The property owner of the tidelands will notify the EPA project coordinator for the Marine OU at least 3 months prior to initiation of such action. The property owner shall provide all information requested by EPA for EPA's evaluation of the proposed action.
- The property owner of the tidelands will notify the KPC/Louisiana-Pacific project coordinator for Ward Cove at least 3 months prior to initiation of such action.
- The EPA project coordinator will notify the appropriate contact at the State of Alaska Department of Natural Resources (which is delegated to DEC through a management rights assignment).
- EPA will determine the methods needed to assess the magnitude of the damage to or disruption of the cap.
- The property owner will assess the magnitude and scale of the cap disruption using the methods specified by EPA.
- EPA will determine the appropriate response action to address the damage.
- The property owner will ensure replacement of portions of the cap that are materially damaged, as specified by EPA.

- The property owner will submit two copies of a written report summarizing the completed action(s) to the EPA project coordinator for approval. The report shall describe all work performed (work completed, work dates, results of analyses, project personnel, problems encountered, and resolutions) and shall include as-built drawings of the completed construction work signed and stamped by a professional engineer registered in the State of Alaska. The report shall be revised in response to EPA comments.
- The property owner of the tidelands will be liable for EPA's costs associated with reviewing and overseeing the action or proposed action that is deemed by EPA to violate the institutional control.
- These procedures and requirements do not act to relieve current and future owners of any obligations under the CERCLA Consent Decree.

The shoreline area subject to the inspection is about ½ mile long and consists of marine infrastructure along the shoreline seawall, including a pier and a separate dock approximately 225 feet long with four support pilings. Attached to the dock are two green float houses for a local aquaculture business. When stored in Ward Cove there are no occupants and therefore no overnight lodging. When in use, the float houses are hauled out to various fish hatchery sites (outside of Ward Cove) for housing seasonal employees. South of the dock, two AMHS ferry vessels were moored at the pier. AMHS rents the pier for vessel storage from PSSA under a continuous layup agreement.

During the inspection, DEC and EPA learned from PSSA that the number of pilings for the 225-foot dock was increased from three to four a few years ago. The additional piling was installed through the sand cap in this area with a vibratory pile driver, under a permit by USCOE. EPA was not informed of the proposed change as required by the site's institutional controls. In addition, under state law, a person shall provide written notice to the department of any proposal to use the site in a manner that is inconsistent with a restrictive covenant or easement (18 AAC 75.375). As a result of this action, DEC and EPA will require PSSA to work with EPA and DEC to create a plan to assess the magnitude and scale of any cap disruption that may have occurred as a result. If any disruption has occurred, PSSA must ensure replacement of portions of the cap that are materially damaged, as approved by EPA and DEC.

#### **Future Development Plans for the Uplands OU**

As part of the institutional control requirements, DEC and EPA should be notified in advance of any development plans and permit applications that propose to use the site in a manner that is inconsistent with 18 AAC 75.375 and associated institutional controls described in the 2000 Institutional Control Plan. The plans that DEC is currently aware of are as follows:

Former Mill Area: On October 15, 2019 PSSA provided DEC with a written summary of future development plans for this area, to be renamed The Mill at Ward Cove.

- Relocation of the Full Cycle Alaska building and soil and rock from a parcel inside the Uplands OU to a vacant lot within the Uplands OU. In accordance with the 2000 Institutional Controls Plan, and 18 AAC 75.370, PSSA will submit a sampling and analysis plan to characterize the soil on the Full Cycle Alaska property for EPA and DEC's review and approval.
- Future plans for the mill area will support tourism traffic and include a boardwalk and upgrades of the current historic buildings to provide a welcome center, museum, and restrooms. Three 1970s-era metal buildings will be removed but the foundations will be left in place and used as patios and bus parking. The bus parking and staging area will initially be graded and capped with

gravel but may later be capped in concrete or asphalt. Road widening is planned for the entry road that runs along the side of the administrative building and parking lot. Utility and water line installations are also planned.

- PSSA has verbally described plans to establish a walk-in medical clinic at one of the historic buildings on the former mill site.

Please provide DEC and EPA with written notice and description of these and any other proposed projects/activities that may be subject to the requirements of the 2000 Institutional Controls Plan and the requirements of 18 AAC 75.375, so that they can be evaluated to determine necessary requirements such as work plans or sampling and analysis plans, prior to beginning work.

#### **Future Development Plans for the Marine OU**

- The Ward Cove Dock Group, LLC, comprised of the Spokelys and Godspeed, Inc., owned by the Binkley family, are currently proposing construction of a large cruise ship dock designed for post-Panamax vessels. This structure and vessel operation will occur in and near the Area of Concern in Ward Cove. This project is currently in the permitting process with the U.S. Army Corp of Engineers.
- Ward Cove Industries has proposed construction of a barge haul out dock near the northeast end of Ward Cove. This project is currently in the permitting process with the U.S. Army Corp of Engineers.

As described in our 9/19/2019 letter providing comments on the ACOE permit applications for these projects, DEC has requested and project developers have agreed to provide the following:

1. Prior to the commencement of construction activities, a pre-construction benthic seafloor survey and sampling/analysis plan be submitted for DEC and EPA approval to document baseline conditions prior to construction in the areas of the Marine OU where construction activities for both facilities are proposed to occur. The work plan objectives should mimic those described in the long-term monitoring and reporting plan submitted by Exponent in 2001 and reiterated in the 2007 Monitoring Report for Sediment Remediation in Ward Cove, Alaska, authored by Integral Consulting, Inc. and submitted in April 2009.
2. Submission of a benthic seafloor monitoring plan for DEC and EPA approval prior to the commencement of cruise vessel operations, which assesses conditions in the areas of the Marine OU where vessel activity will occur. The work plan objectives should mimic those described in the long-term monitoring and reporting plan submitted by Exponent in 2001 and reiterated in the *2007 Monitoring Report for Sediment Remediation in Ward Cove, Alaska*, authored by Integral Consulting, Inc. and submitted in April 2009. Monitoring under the approved plan will be conducted after the first season of operations and may be required for a second year, based on facility operations and results of the first year of monitoring.
3. Within 90 days prior to operation, submission to DEC, EPA, and other agencies (such as USCG) as appropriate, of a best management practices operation plan that is developed in coordination with cruise vessel pilots and tug operators along with the other users of Ward Cove. The plan should outline the general navigational route and docking locations for the types of vessels and

tugs and their propulsion systems. The plan should describe maneuvering scenarios under a variety of wind, current, and traffic conditions as well as location and depths of those activities and the potential for scour impacts (if any). The plan should describe how operations will occur to avoid impacts to the Marine OU under the scope of anticipated (wind, current, traffic) conditions. It should include but not necessarily be limited to procedures for documenting and reporting on adherence with the plan; measures for improvements; and signatories (participants) in the plan.

4. A work plan be submitted for DEC and EPA approval for the proposed upland excavation activities including sampling and analysis to:
  - a. Comply with requirements identified in the Management Plan for Arsenic in Rock and Soil to reduce exposure to arsenic in soil and rock;
  - b. Identify and address source areas (if any) during demolition and excavation activities using applicable or relevant and appropriate requirements such as current risk-based concentrations or standards and criteria; and
  - c. Properly characterize and manage soils excavated from the near-shore fill subarea or underneath paved areas or structures and from other locations not evaluated or characterized in the remedial investigation.

Please note that the deliverables listed above do not necessarily satisfy all of EPA requirements, or shield you from federal Superfund liability. To ensure that your project complies with EPA requirements, please refer to EPA's November 6, 2019 letter.

### **DEC plans regarding future institutional control management**

DEC anticipates that the pace of your company's development activities at the former mill property will increase in frequency and intensity going forward. To facilitate better coordination and ensure compliance with institutional controls, DEC will plan to conduct an inspection with PSSA on an annual basis or more frequently if needed. In addition, we are reiterating the Notification Procedures for routine and major excavations and demolitions. These activities are defined in the 2000 Institutional Controls Plan.

### **Notification Procedures**

Notification procedures for the Upland OU are as follows (See Table 3 from the 2000 Institutional Controls Plan). The landowner (PSSA) will notify both DEC (Contaminated Sites Program) and EPA (Region 10 Remedial Project Manager) by email if any of the following occur:

- Major demolition activities are planned
- Any sampling is to be conducted during major demolition
- Any soil samples collected during routine excavations or demolition activities which exceed soil screening levels
- Suspect debris (e.g., buried drum or paint can) is found during routine excavations or demolition activities.

All sampling must be performed in accordance with the 2000 Institutional Controls Plan and a DEC approved sampling and analysis plan (18 AAC 75.355). Any offsite transport of soil or groundwater requires prior approval from DEC (18 AAC 75.325(i)). Offsite transport and disposal request forms can

be found here: <http://dec.alaska.gov/media/12127/transport-treatment-disposal-approval-form-for-contaminated-media-fillable.pdf>

For notification requirements concerning work in the Marine OU, refer to the Marine OU inspection section above.

In addition to the conditions described in this letter, you are required to notify the ADEC if there are any changes in land use or ownership that may be in conflict with the institutional controls for this site. Failure to maintain these requirements may result in re-opening the site by the Contaminated Sites Program, in which case, further remediation could be mandatory.

In accordance with 18 AAC 75.380(d)(2), ADEC may require additional site assessment, monitoring, remediation, and/or necessary actions at this facility should information become available that indicates contamination at this site may pose a threat to human health or the environment.

DEC's site information is a matter of public record and is available at ADEC's online database record at: <http://dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/SiteReport/412>

If you have any questions regarding this site, please contact Evonne Reese of the Institutional Controls Unit at (907) 465-5229 or [evonne.reese@alaska.gov](mailto:evonne.reese@alaska.gov).

Sincerely,



Sally Schlichting  
Environmental Program Manager

Copy via email:

Kenda Conley, R&M Engineering - Ketchikan  
Phil Benning, Ketchikan Pulp Corporation/Louisiana Pacific  
Eric Fjelstad, Perkins Coie  
Christen Harrington, ADOT&PF, AMHS Ketchikan  
John Falvey, ADOT&PF, AMHS Ketchikan  
Ward Mace, ADOT&PF, AMHS Ketchikan  
Sean Lynch, Department of Law  
Rick Welsh, Department of Law  
Glenn Brown, Borough Attorney, Ketchikan Gateway Borough  
Kathy Cerise, Remedial Project Manager, EPA Region 10  
Jenn Currie, Department of Law  
Jim Rypkema, DEC Division of Water  
Christi Scott, DEC Solid Waste Program