

**Memorandum of Understanding  
between the State of Alaska and the City and Borough of Sitka**

**Management Plan for Sawmill Cove Property  
(Former APC Property)**

This memorandum of understanding (MOU) “Management Plan” is made between the State of Alaska (State) and the City and Borough of Sitka (CBS) to set forth measures for implementing recorded institutional controls and other long-term responsibilities for management of the former Alaska Pulp Corporation property (Property, Exhibit 1) on Silver Bay, Sitka, Alaska.

This Management Plan describes how CBS and the State will work together to implement the recorded institutional controls and site management activities for: (1) the uplands area and future land uses on the Property; (2) landfills; (3) navigation and dredging; (4) outfalls and water quality; and (5) the long term monitoring plan for natural recovery and protectiveness of the remedy.

#### Introduction

From approximately 1995-1999, the State has intensively studied the environmental conditions of the Property and the larger areas affected by the operation of the former APC pulp mill (the Upland and Bay Operable Unit study areas) in consultation with the Sitka Tribe of Alaska, other agencies, and the public. This Management Plan specifies the work to be performed under a prospective purchaser agreement between the State and CBS for the former APC pulp mill property and is Attachment 3 to the agreement. The PPA limits CBS liability for existing contamination associated with the Property in exchange for this work. DEC will not require CBS to do any restoration or remediation work on the Property outside of what is required in this Agreement and in DEC’s Record of Decision.

This Management Plan implements the Record of Decision (ROD) of the Alaska Department of Environmental Conservation (DEC) for the upland and bay operable unit study areas, the remedy set forth in the ROD for the Area of Concern (AOC, Exhibit 2) in the bay, including responsibility for long term monitoring. This Management Plan also defines coordination between institutional controls and the waterbody recovery plan being developed for Silver Bay.

#### **I. UPLAND & LAND USE**

##### **A. Deed restrictions and notices.**

1. Deed restrictions or notices have been placed on the entire Property, as described in Exhibit 3. These deed restrictions maintain the following limitations on future use, except as may be modified under the terms of the restriction or notation. This section further clarifies the terms of the deed restriction in order to ensure

consistent interpretation and implementation of the restriction and to provide certainty to potential future users and the public.

- a. Property use. The Property can be used for commercial/industrial (i.e., non-residential) purposes. The Property cannot be used for human habitation, schooling of children, hospital care, childcare, or any purpose necessitating round-the-clock residency by humans. The State of Alaska, Department of Law has the authority to remove this restriction if contaminant levels meet residential cleanup standards established by DEC.
  - b. Related uses. Typical uses that are allowed under this restriction include the following: (1) public facilities (e.g., roads, other infrastructure, offices); (2) short-term, part-time residency on board moored vessels; (3) recreational uses in Silver Bay; (4) educational, health care, or similar uses where there is no on-site residency or where use by minors occurs indoors (e.g., out patient or emergency care, vocational training, professional offices).
  - c. Duration. The uplands restrictions exist until July 11, 2097 or until DEC determines that dioxin/furan concentrations are low enough for residential use to be an acceptable risk. The deed notations associated with the landfills remain in effect permanently. The deed notice establishing the No Disturbance Zone will remain in effect until July 1, 2040 or until DEC determines that a NDZ is no longer necessary to protect human health, welfare or the environment.
  - d. Modification. Of its own accord or if requested by CBS, DEC will review information showing that the deed restrictions may be modified or lifted.
- B. Completion of petroleum contaminated soil cleanup.
1. CBS will complete treatment of petroleum contaminated soils in accordance with 18AAC 75. The CBS project manager will be the Environmental Superintendent or designee, who will provide a final written report to DEC within 30 days of completion of the work.
  2. Recognizing the limited construction season in Sitka, DEC will review and respond to CBS as soon as possible after receipt of CBS's request for a completion letter, including conducting any on-site inspection if needed. DEC will provide CBS with a letter confirming completion of the work upon DEC's verification that the work has been satisfactorily completed.
- C. Future construction activities and management of soils or other media.
1. Reporting. If contaminated soils or other media that require special handling are encountered during construction activities, CBS or its tenants or contractors working on the Property will promptly notify the CBS Public Works Director. In

- addition, if contaminated soil or hazardous substances are encountered, CBS will notify DEC. These obligations exist, in addition to all other notifications required by law. The Public Works Director or designee, who may be a qualified contractor, shall serve as the project manager for managing the material or taking any remedial actions.
2. Site management. The Public Works Director or designee will require the testing and proper treatment or disposal in accordance with applicable law and DEC regulations or guidance on the management of contaminated soils or other contaminated media. The Public Works Director or designee will promptly report the actions to be taken to DEC as required by applicable law.
  3. DEC approvals. DEC will process any approvals necessary for addressing existing contamination as part of the implementation of the ROD and its institutional controls under applicable regulations and not as enforcement actions.

## **II. LANDFILLS AND POST CLOSURE MONITORING AND CORRECTIVE ACTION PLAN**

There are two landfills on the Property previously owned by APC. The first is at Herring Cove. The Herring Cove Landfill has reached the end of its post-closure monitoring period. A final inspection and report will be prepared by APC. It is the responsibility of APC to take whatever actions are necessary to gain DEC approval for the termination of the post closure period. CBS will not be obligated to conduct monitoring or other activities at the Herring Cove Landfill unless new information about the site becomes available to indicate the landfill is causing pollution or the landfill displays signs of structural failure. CBS will be responsible to complete or pay for future corrective action or monitoring if any is necessary at the Herring Cove Landfill. The remainder of this section refers to the second landfill, which is located adjacent to Sawmill Creek and is known as the APC Industrial Waste Disposal Site.

- A. Timing and responsibility for post-closure activities for the landfill. At such time as DEC approves the post-closure improvements by APC, CBS will assume responsibility for maintaining the landfill in perpetuity. This responsibility includes: (1) performing the post-closure long term monitoring plan below, and (2) repairing and maintaining the general industrial waste landfill cap, diversion ditches and subsidence monitoring controls in a manner that meets the performance standards specified below. DEC's approval of final as-builts of the improvements in the 1999 Site Improvements Completion Report will replace the current list of recommended improvements attached as Exhibit 4.
- B. Long term inspection monitoring and corrective action program for the general industrial waste landfill. CBS will inspect and monitor the landfill according to the following schedule up to December 31, 2022, subject to periodic evaluation of the monitoring program in paragraph B.6. The monitoring program outlined in

this document is considered detection level monitoring. If problems are discovered, assessment level monitoring to evaluate the problems will be implemented by CBS to DEC's satisfaction, and alternative corrective action plans will be proposed by CBS for DEC's approval. CBS is responsible to complete or pay for corrective action deemed necessary by DEC at the landfill. The CBS project manager will be the Environmental Superintendent or designee.

1. Visual inspections.

- a. CBS will conduct visual inspections four times in the first year, two times in the second year when sampling surface water, then annually or as otherwise required by the long term inspection and monitoring program. The annual site inspections will be conducted during typical wet-weather conditions to provide a reasonable basis for evaluating water drainage structures and potential leachate seepages.
- b. Each visual landfill inspection will identify and characterize all active leachate seepage locations along the toe of the landfill embankment.
- c. Exhibit 5 contains the visual inspection forms to be used in carrying out and describing the inspection results for each of the four areas within the landfill.
- d. Each inspection report will also include a brief narrative summary that will:  
(1) characterize the overall landfill conditions and results of that inspection;  
(2) briefly describe the weather conditions over the last few weeks, and water runoff conditions at the time of inspection; (3) compare previous annual inspection reports; and (4) characterize the overall integrity of the site.

2. Monuments.

- a. As part of the post-closure improvements, APC is responsible for installing a minimum of three (3) survey monuments at locations approved by DEC, and for establishing the initial location coordinates for each monument.
- b. CBS will re-survey the locations of each survey monument annually, or as otherwise required by this long term inspection and monitoring program. The results will be reported to DEC, with a comparison to the original monument locations and the previous year's results. Maintenance of survey monuments and corrective action based on monument surveys is addressed in paragraph II.C.

3. Leachate monitoring. DEC and APC's consultant predict there will be three seeps after the corrective action and that two of the seeps can be combined into a single sampling station for a total of two sampling stations. DEC reserves the right to modify the number of sampling stations and number of samples required if after the corrective action these predictions prove to be inaccurate.

- a. At the three currently active leachate seepage locations that exist, up to two sampling sites will be identified and developed such that representative samples may be obtained.
  - b. Samples shall be obtained from up to two sampling stations two times during the first two years and annually thereafter. During the first two years one sample shall be taken in autumn and the other in spring or summer such that high-flow and low-flow of the seeps are both represented.
  - c. Flow rates will be estimated and the seepage stream at each sampling site will be sampled independently for all field determined parameters.
  - d. If wells are installed by APC, CBS will measure water levels. If required water samples cannot be collected at the seep because the seeps are dry, well sampling points may be substituted if DEC determines that the sampling will provide information necessary to assess the impacts of leachate on surface water.
  - e. The initial sampling parameters and analytical methods to be evaluated and reported to DEC are shown on Table 1 in Exhibit 6 and will be updated based on sampling results, as described in paragraph II.B.6.
  - f. The sampling analysis methods, except for the mercury testing, shall be those as determined by test methods that are compatible with those defined in the Alaska Water Quality Standards 18 AAC 70.020(b).
4. Earthquake Monitoring.
- a. For purposes of this section, earthquake intensity is measured by the modified Mercalli intensity scale of 1931 as amended for this plan. That scale describes:
    - a level VI Earthquake as: felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight. Earthquake is reported in Sitka by local newspaper, radio or other public media.
    - a level VIII Earthquake as: damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimney, factory stacks, columns, monuments, and walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed. Earthquake is reported in Sitka by local newspaper, radio or other public media.

- b. Within 60 days after any earthquake in Sitka of Level VI intensity or greater, CBS will: conduct a visual inspection of the landfill, and if there are visible cracks, CBS will re-survey the locations of survey monuments and will report findings as described elsewhere in this Plan. The obligations of this paragraph continue even if the survey frequency has been reduced under paragraph II.B.6.a.
  - c. If an earthquake of Level VIII or greater intensity occurs in Sitka and all survey monuments remain within one foot of their original locations, the DEC will discontinue the requirement to survey the monuments.
5. Reporting.
- a. Each visual inspection summary will be transmitted to DEC within 60 days after each inspection, along with completed visual inspection forms and any water quality sampling results.
  - b. After each survey of the monuments along the landfill embankment a report will be transmitted to DEC within 45 days of the survey.
6. Periodic evaluation. For any or all areas of the landfill DEC will reevaluate the long term inspection and monitoring program from time to time at the request of CBS based upon monitoring data to determine if the frequency of monitoring/inspections may be reduced or eliminated. The available data will be reviewed, including monument surveys, visual inspection reports, and leachate monitoring results.
- a. If, after the first five years of monitoring, the horizontal movement of survey monuments toward Sawmill Creek tidelands is less than one foot from their original location, the survey frequency will be reduced to every five years. Horizontal movement shall be measured from an imaginary vertical line passing through the center of the monument when it was constructed.
  - b. Upon request of CBS, or after 10 years, DEC will re-evaluate the leachate monitoring plan based on data received. The decision to continue, reduce, or discontinue leachate monitoring will be based on whether this sampling information indicates that leachate is having or is likely to have adverse impacts on surface waters. If sampling is reduced or eliminated, DEC may require that monitoring recommence if problems are subsequently identified.
- C. Maintenance. CBS will perform maintenance if necessary to maintain the conditions documented in the 1999 Site Improvements Completion Report (as finally approved by DEC), Exhibit 4, after APC has completed the corrective action described in Exhibit 4.

1. Disturbance of survey monuments. Maintenance activities should not disturb the survey monuments. If a survey monument is disturbed it must be replaced as close as possible to the original location and resurveyed. If survey monument horizontal movement had previously been detected, future horizontal movement of the replaced monument must be added to the original horizontal distance for comparison set forth in paragraph II.C.2.
2. Corrective action based upon survey monument movement. If, at any time, the horizontal movement of any of the survey monuments toward Sawmill Creek tidelands is more than one foot from the original location, CBS will immediately evaluate the potential causes for the movement. CBS will transmit the evaluation results and a proposed corrective action plan to DEC within 60 days of the survey. Upon approval by DEC, CBS will carry out the corrective action plan and provide DEC with a report of the completed activities within 30 days of completion.
3. Maintenance standards. The standards set forth below shall be the standards and conditions on which any future maintenance shall be based, unless the parties mutually agree that a less intensive level of maintenance is protective.
  - a. The drainage improvements are permanent and have succeeded in substantially reducing upslope surface water infiltration.
  - b. The leachate seepages have been reduced to minimal levels.
  - c. A healthy grass/vegetative cover has been established across the top surface of the site.
  - d. No significant cracks have opened up, and no unstable areas are observed anywhere along the site's outside embankments, similar to the conditions that required the post-closure improvements.
  - e. There are no areas of erosion that are likely to affect the integrity of the site.
- D. Close-out. At the termination of the long term inspection and monitoring program, CBS will submit a final report for approval by DEC. If the report is approved the post closure period will terminate and no further monitoring will be required.

### **III. NAVIGATION AND DREDGING**

- A. Navigational dredging. – Navigational dredging on the west side of Sawmill Cove in the AOC can occur only in a navigational corridor (see Exhibit 2). Navigational dredging outside of the AOC (see Exhibit 2) is likewise consistent with waterbody recovery goals, subject to the normal permitting process. Navigational dredging within the AOC does not include blasting of the outcrop of

- native rocky material in front of the former pulp dock that follows the depth contours to the southeast. Maintenance dredging is anticipated to occur in approximately 10-year intervals, but could vary depending on sedimentation rates. Dredging actions that occur outside of the Navigation Corridor will be limited in scope and ancillary to in-water construction.
- B. Dock use and future expansion. – DEC has determined that: (1) the existing docks can be used as is without any further regulatory action subject only to recorded deed restrictions and notices and (2) berthage and dock expansion alternatives identified in the Decision Framework for Managing Navigation in Sawmill Cove (Exhibit 7) are consistent with the proposed remedy and may be implemented through normal permit processes. Other berthing options are not necessarily precluded, but if proposed, they would have to be evaluated in the future for consistency with the proposed remedy.
- C. In-water construction. – In-water construction in the AOC will be allowed with appropriate precautions incorporated through the permit process. In-water construction in the AOC, including pilings, dolphins, docks, moorage and navigation aids, will employ best professional judgment to specify best management practices (BMPs) to minimize disturbance or resuspension of sediments. An example of an appropriate BMP for drilling, socketing and anchoring piling in bedrock is to remove overlying sediment (if a thin layer exists) or to employ and then clean out a casing used in conjunction with the drill bit (if a thick layer exists).
- D. No Disturbance Zone.
1. A No Disturbance Zone (NDZ) has been established within the AOC (see Exhibit 2). The purposes of the NDZ are to minimize resuspension of pulp residue and to ensure that no activity occurs that may compromise the ability of the area to achieve the natural recovery ecological management goals within the stated time frame. The NDZ encompasses approximately 5-6 acres of tidal and submerged lands that are covered with pulp residue extending to the southwest immediately offshore of outfall 001.
  2. Dredging, expansion of moorage and in-water construction are prohibited in the No Disturbance Zone, except for the following activities: (1) CBS may repair, maintain, or remove existing facilities using best management practices as provided in paragraph III.C and approved by DEC prior to the work; (2) CBS will place and maintain a new navigational marker(s) as provided in paragraph III.E.1; (3) vessels may traverse this zone as provided in paragraph III.E.; and (4.) existing stormwater and treated sanitary discharge from outfall 001 may continue, as provided in paragraph IV.C.

E. Vessel management.

1. CBS will place a navigational boundary marker or other navigational aid at the – 50 ft MLLW contour of the No Disturbance Zone (Exhibit 2), as determined in consultation with DEC and the US Coast Guard (and which might be located on an existing dolphin). Approaching or departing ships shall not pass over the NDZ shoreward of the line between the seaward corner of the dock and the navigational boundary marker.
2. CBS recognizes and accepts that vessels are not permitted to drop anchor in the Area of Concern. “Anchoring” means dropping anchor, not securing to a buoy or fixed structure. CBS will include a provision in any Port Authority Development Plan that includes the Property, and in any leases or other conveyance of navigational rights in the Property, that:
  - a. Vessels are not allowed to anchor in the AOC; and
  - b. To the extent that it is safe and practicable, the following standard operating procedures will be followed by personnel maneuvering approaching or departing vessels in the vicinity of the NDZ:
    - i. Approach the dock at as high an angle as possible.
    - ii. Minimize the use of the main propulsion system, thrusters, and tugs when over or near the NDZ or buffer zone.
    - iii. Use as low a “bell” (such as “dead slow” or the slowest reasonable revolutions per minute ordered) when berthing.
3. DEC will request NOAA or other agencies as appropriate to show the AOC as a “no anchor” zone on navigational charts of Silver Bay and Sawmill Cove. CBS will request this designation be removed at such time as DEC has determined that sufficient natural recovery has occurred.
4. The existing mooring buoy in the south end of Sawmill Cove may be used or reconstructed for future use by larger vessels. Vessels may traverse the AOC and may be moored in the AOC on single point moorage, as long as they comply with the above restrictions.
5. Any other mooring buoys and navigation aids may be used and reconstructed. New single point mooring buoys and navigation aids may be established in the AOC so long as they are outside the No Disturbance Zone (other than the navigation aid in the NDZ under paragraph III.E.1).

#### IV. **OUTFALLS & WATER QUALITY**

- A. Waterbody Recovery Planning. DEC will not require CBS to do any restoration or remediation work in the Area of Concern outside of what is required in this agreement and DEC's Record of Decision. Any additional controls required of CBS or its tenants in the waterbody recovery plan will be implemented through the normal permitting process and will be consistent with CBS use of the Property, as provided in this agreement.
- B. Location in the AOC. With the exception of relatively clean industrial water from between the utility and former pulp docks, the AOC is presumed not to be suitable for wastewater outfalls for the foreseeable future (e.g, 20+ year timeframe).
- C. Stormwater and existing outfalls in the AOC. DEC has determined that existing permitted discharges and new outfalls for stormwater in the AOC are consistent with the proposed remedy and waterbody recovery plan under development, subject to the normal permitting process. Therefore, existing stormwater and treated sanitary discharges from outfall 001 may continue. As may be required when permit applications are submitted, DEC may permit the use of standard modeling to confirm that proposed discharges and activities will not resuspend contaminated sediments in the AOC or discharge pollutants that will set back the natural recovery process.
- D. Other outfalls and discharges. Any other outfalls or discharges within the boundary of an impaired waterbody established under state or federal law, as the boundary may be defined at the time of the proposed discharge, are not necessarily precluded. If proposed, however, they will need to be evaluated in the permit process for consistency with the proposed remedy and waterbody recovery plan to be certain they would not: (1) resuspend contaminated sediments, or (2) set back the natural recovery process in either the AOC or the other impaired areas in Sawmill Cove.
- E. Disclosure to future users. Additional inputs of toxic and deleterious substances and residue in portions of Silver Bay considered to be impaired waterbodies will be limited. Where appropriate, CBS will seek to inform prospective users that review of proposed discharges within any impaired waterbody boundary will likely involve a more detailed review by permitting agencies of source control, additional treatment, and the potential for additional monitoring costs to confirm performance.
- F. Construction of new outfalls. No new outfalls may be constructed in the No Disturbance Zone (see Exhibit 2). In-water construction within or adjacent to the AOC will incorporate appropriate BMPs through the permit process if determined to be necessary. Should CBS want to extend the primary wastewater discharge point from outfall 001, under permit, toward or into the vicinity of Bucko Point,

DEC will not oppose such extension and will support CBS efforts to secure grants or other funding to finance the extension.

**V. LONG TERM MONITORING FOR NATURAL RECOVERY AND PROTECTIVENESS OF THE REMEDY**

- A. The long term monitoring program for evaluating natural recovery and protectiveness of the remedy, and ultimate contaminated sites file closure has two main components: (1) the long term monitoring program; and (2) the monitoring methods/plans (e.g., sampling and analysis methods) that specify the detailed field monitoring protocols to implement the program (which will be included as Exhibit 8 when approved by DEC. It is DEC's expectation that APC will complete the monitoring methods/plans by June 1999.)
- B. Responsibility for long term monitoring. CBS will implement the long term monitoring program and monitoring methods/plans set forth in Exhibit 8. The Year 1 baseline monitoring will occur in 1999 or 2000 at the latest. The State and CBS agree that the management approach and decision framework set forth in the long term monitoring program, and the results of monitoring events, will guide all future decisions regarding monitoring and natural recovery of the AOC.
- C. Project manager. The Environmental Superintendent or designee shall be the project manager for CBS and the Contaminated Sites Remediation Program Manager shall be the project manager for DEC.
- D. Coordination with waterbody recovery plan.
1. DEC and CBS intend to cooperatively develop a component of the long term monitoring program that will complement a waterbody recovery plan for the impaired waterbody that includes Sawmill Cove. Any components that are cooperatively developed and included in the monitoring program under this paragraph will be considered voluntary, not part of the required long term monitoring of the AOC. Voluntary components may be funded differently than the required monitoring.
  2. Planning and implementation. DEC and CBS intend to cooperate in development and review of the waterbody recovery plan for Silver Bay. DEC plans to work together with CBS, the Sitka Tribe of Alaska, and other interested public to identify grant funding opportunities for water quality and habitat improvements in Silver Bay, including Herring and Sawmill Coves.
  3. Program Manager. For waterbody recovery planning, the Environmental Superintendent or designee shall be the project manager for CBS and the Water Quality Program Manager shall be the project manager for DEC.

## VI. MISCELLANEOUS PROVISIONS

A. Permits. Nothing in this Management Plan exempts a specific site use or redevelopment activity from obtaining any permits required by law.

B. Usage. Terms used in the Management Plan shall have the following meaning or usage, unless otherwise provided in the plan:

1. “Any” means “if any.”
  2. “Applicable law” means the law in effect at the time the management activity is undertaken (not at the time the mou is executed).
  3. “Days” means calendar days, including weekends and holidays.
  4. “Depths” are relative to MLLW.
  5. “Designee” means any person or contractor authorized by the responsible official identified in the management plan or its exhibits.
  6. “Including” means including but not limited to.
  7. “Public review” means a combined, joint review process and period by the State and CBS. At a minimum, public notice will be provided by CBS and documents will be available at City Hall in Sitka. Where action is required on a management action by the CBS Assembly, notice and opportunity to comment means the notice and time period that CBS would otherwise provide to the public prior to action by the Assembly. This process shall not alter any required notice and comment periods for DEC permitting actions under state law.
- C. Any schedule in this Management Plan may be modified (shortened or extended) by mutual agreement. Such agreement can be documented by letter or electronically without the need to amend this agreement
- D. Exhibits may be updated or revised and substituted for the attached exhibits with mutual consent and written confirmation by both parties and without the need to amend the Management Plan.

### List of Exhibits

**Exhibit 1** – Description of “the Property”

**Exhibit 2** – Description of the Area of Concern (AOC) and the Navigational Corridor, the No Disturbance Zone (NDZ), and the Buffer Zone within the AOC

**Exhibit 3** – List of deed notices/restrictions



### EXHIBIT 3

List of deed notices/restrictions.

1. The following Restrictive Covenants recorded in the First Judicial District at Sitka, Alaska:

(a) Book 126, Pages 711-712, pertaining to U.S. Patent No. 1213671 (recorded Sept. 4, 1997);

(b) Book 126, Pages 709-710, pertaining to Sitka Plat 81-40 (recorded Sept. 4, 1997);

(c) Book 126, Pages 713-714, pertaining to U.S. Survey 2797 (recorded Sept. 4, 1997);

(d) Book 126, Pages 715-716, pertaining to Alaska Tidelands Patent 20, as described by ATS No. 6 (recorded Sept. 4, 1997);

(e) **[Reges to insert book and page of new covenant for bay]**

2. The following Deed Notations recorded in the First Judicial District at Sitka, Alaska:

(a) Book 131, Pages 292 and 293, pertaining to the Asbestos Cell in the Industrial Waste Landfill contained within a portion of U.S.S. 3551 (dated June 22, 1998 and recorded June 23, 1998)