

Comment on the proposed Agreed Order and Public Participation Plan for cleanup actions at the former Grays Harbor Paper site:

Landau Associates provided a “Current Environmental Conditions Report” to WA Dept of Ecology in March 2017, based mostly on testing done in the mid-90’s, on behalf of Rayonier Advanced Materials. Rayonier was at the time putting the site up for sale, and industrial development was anticipated. All of my comments and questions below are based on this report.

It is not clear to me that Ecology observed or monitored the tests in the “Current Environmental Conditions Report” (which were done nearly 30 years ago). Did the company responsible for the pollution provide the testing?

In general, the top of the water table is noted at between 2 and 10 feet down (1.3.2 Hydrology), which is at depths where much of the toxic pollution was found in soils about 30 years ago. How will you determine whether all contaminated soils were removed? If there is still contaminated soil, have the pollutants moved? Is it getting into the water from soils or from under buried structures as the tides ebb and flow?

Figure 3 shows groundwater historical data. There appear to be chemicals in the water above MCTA allowed concentrations all along the boundaries of the site where it meets the water. Is this still getting into the water and affecting aquatic life? How about the slime the shorebirds depend on for nourishment at the nearby National Wildlife Refuge (of course, the shorebirds don’t stop at the refuge boundary)?

Have the methods to identify and quantify toxic pollutants improved in the last 30 years?

I don’t think you can assume pollutants soils or in the water table have not moved in thirty years, or will not move in the future. The tides and groundwater movement alone could move pollutants. If the source of the pollution that is getting into the water is not cleaned up, and a new activity such as the proposed pellet mill is allowed to operate on this site, I am concerned that a combination of the tides, the increased pressure of heavy stationary equipment, intense vibrations from hammermills and other stationary equipment, and movement of many large vehicles with heavy loads flexing the pavement will cause groundwater to move and dislodge pollutants in soils.

Boneyard Area, #1 on map: Elevated TPH, PCB, lead and chromium levels were identified in the soil and groundwater. The area was capped and institutional controls were in place. What is the “cap” made of, and is it still there? Is it permeable? What are those institutional controls? Has this pollution moved? The entire edge of the Boneyard Area bordering on the water appears to have chemical concentrations exceeding MTCA Method A CUL (Figure 3).

Paper Mill, #2 on map (Figure 1), Note 1 says “Previous sample locations in Paper Mill parcel not shown due to high density.” The description in the report (2.2.1 Paper Machine Area, Cleanup Site ID nos. 1172 and 2262) says the paper mill was owned by Rayonier 1920s -1992, then Grays Harbor Paper 1993-2013. Soils were sampled from 52 locations beneath the then-standing paper machine building. Concentrations exceeded the 1993 MTCA cleanup levels for TPH-D, TPH-O, and PCBs, prompting Ecology to designate the former Paper Machine Area as a cleanup site (ID no. 1172, and later ID No. 2262). In response to investigation results that indicated a release to the environment, a cleanup action was undertaken to remove soils with chemical concentrations of concern. Several remedial excavations were conducted in 1995 which removed approximately 380 tons of TPH-contaminated soil and 292 tons of PCB-contaminated soil and wood debris from beneath the paper machine building. Approximately

100 confirmation samples were subsequently collected from the base and sidewalls of the excavations. TPH and PCB concentrations exceeding the 1993 MTCA cleanup levels remained. In a letter dated March 15, 1996, Rayonier AM petitioned Ecology to review the results of the interim action and to issue a "No Further Action Determination" (NFA). Ecology did not issue a NFA determination. Data is available in Tables 2 and 3 in the report. Figure 2 shows areas where MTCA cleanup levels are exceeded. (It is not clear to me if/why soil sampling locations and results where soil was later removed are not included.) There are places where TPH concentrations and PCB concentrations still exceed the cleanup level. Excavations were discontinued due to physical constraints of the building structural components (note that now, the building has been removed - has this site been tested to find probable contamination which could not be reached when the building was there? There is no groundwater data available for this area, in this report. Why? That should be something that can be gathered now. Has the contamination that has remained in the soils moved? Is it in the groundwater (which may be 2-10 feet below ground level, depending on topography)? In Figure 3, there are Chemical Concentrations Exceeding MTCA Method A CUL in the groundwater along the edge of the Chehalis River on both sides of the Paper Mill site, but no test locations are shown along the edge of the Chehalis River where it borders the Paper Mill site (There are also Chemical Concentrations Exceeding MTCA Method A CUL in the groundwater along the edge of the Hoquiam River to the west of the Paper Mill site, where the river borders the Boneyard Area.) In the Landau Associates "Current Environmental Conditions Report" which Rayonier provided to WA Dept of Ecology, Rayonier makes the point that This area is not under the ownership or control of Rayonier AM. Does that mean that the results of any testing that may exist are in a report that was done for Grays Harbor Paper? I didn't see that report, but I could have missed it. At any rate, it is obvious that the soils that could not be reached under the building should now be tested (if it has not been), and that groundwater should also be tested since contaminants are likely to have moved, especially this close to the river where there are also tides.

Former Finishing Area, #4 on map: Remedial excavations for TPH contamination. Was all the contamination removed?

Silvachemical Area, #7 on map: Elevated chromium levels in soils and groundwater. Other pollutants were tested for. Were they found? In what quantities? If I'm reading the map correctly there is an Ash Pond in this area. I see some testing near one edge, but not under the Ash Pond. What was in the Cooling Pond, and should there have been testing there? Testing locations within the Silvachemical Area, and south of the Silvachemical Area along the water (south of the Cooling Pond) appear to have chemical concentrations exceeding MTCA Method A CUL (Figure 3). Is this pollution still there? Has it moved?

I did not have time to look at all the documents provided by Ecology, or even at all the locations on this site in the Landau report. I did not find information on the outfalls or Rennie Island, other than in the list of releases or spills, so I did not try to comment on those, but those places are obviously likely to be very contaminated. I do not know how to comment on the damage that the larger spills did in the river itself. Please require the responsible parties to provide the actual current location, identities and concentrations of toxic pollutants in soils and groundwater, and remove them from all locations on this entire site, especially taking whatever actions are necessary to protect and restore the rivers, estuary, and wildlife.

Thank you for your work, and thank you for considering my comments.

Donna Albert, PE (retired)