



Clean Air Act Compliance Inspection Report

United States Environmental Protection Agency
Region 10 – Seattle, WA

Partial Compliance Evaluation

Nippon Dynawave Packaging Co.

Longview, WA

Inspection Dates: October 22-24, 2024

Report Author Signature

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1. Basic Facility and Inspection Information

Facility Location: Nippon Dynawave Packaging Co.
3401 Industrial Way
Longview, WA 98632

AFS Number: WA0000005301500003

Permit Number: Title V Air Operating Permit #0000124
Washington Department of Ecology
Industrial Section

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Inspection Dates: October 22-24, 2024

Inspection Report: December 17, 2024

Inspection Notice: Limited

Disclaimer

This report is a summary of observations and information gathered from the facility at the time of the inspection. The information provided does not constitute a final decision regarding compliance with the Clean Air Act (CAA) and applicable regulations or permits, nor is it meant to be a comprehensive report of all activities and processes conducted at the facility.

2. Introduction

- a) This was a Clean Air Act (CAA) compliance inspection by the Environmental Protection Agency (EPA). Kelsey Brotherton and Emily Toffol with the Washington Department of Ecology (Ecology) Industrial Section participated in the inspection.
- b) The purpose of this inspection was to conduct a partial compliance evaluation (PCE) inspection of the facility. The inspection included a facility walk-through to gain basic familiarity with the facility equipment and processes, and to evaluate compliance with various applicable requirements of the CAA and permit, examination of industrial process and air pollution control equipment, review of various records, and discussions with facility staff, in addition to the observations of the inspectors.
- c) Limited advance notice of this inspection was provided to the facility. I called Steve Mackey around 08:30 and gave verbal notice that we would arrive around 09:00. Limited notice was provided in order to help arrange for prompt access through site security.

3. Inspection Elements and Field Observations – October 22, 2024

- a) The EPA inspectors arrived onsite at approximately 09:00 and met the Ecology staff members at the security building near the facility entrance. We entered the security building where each member of the EPA inspection team presented their federal identification and completed a short video safety orientation. Shortly thereafter, we were met in the security building by Steve Mackey (Sr. Environmental Engineer) and Rebekah Dumestre (Environmental Process Engineer) of Nippon Dynawave Packaging Co. (Nippon). After I presented my inspector credentials to Mr. Mackey and Ms. Dumestre, the group (all 6 agency staff along with the two facility staff) proceeded to drive through the facility entry gate and park near the facility office. The facility staff escorted us to a conference room where we held the opening conference.
- b) Opening Conference
 - 1. In the facility conference room, the group was joined by Brian Wood, Director of Support Services with Nippon. I began the opening conference by explaining that we (EPA inspectors) were onsite to conduct an inspection under the Federal Clean Air Act (CAA), and that the Ecology staff were accompanying us. I explained that the inspection would be a Partial Compliance Evaluation (FCE), which means that the inspection will focus on certain applicable requirements and certain process areas, but will not examine every CAA requirement that applies to the facility. I further stated that we would like to begin with a general walk-through of the facility overall, and afterwards would focus on requirements related to the High Volume, Low Concentration (HVLC) and Low Volume, High Concentration (LVHC) gas collection systems and related process units. Other areas of focus for the inspection were to be determined.
 - 2. A description of the processes and general facility information occurred next, primarily led by Mr. Wood. The following information was provided:

- a. Boiler #11 is a combined fuel boiler fired on hogged fuel, coal, and effluent sludge. The primary fuel is hogged fuel. The boiler is fired on #2 diesel during startup.
 - b. The Kamyr Digester (the only digester operated at this facility) is operated in campaigns that alternate between hardwood and softwood. At the time of the opening conference, the digester was switching between campaigns.
 - c. The primary product from the facility is sulphate bleached solid (SDS) board. This is produced on Paper Machine #3, also referred to as the "L3" by facility personnel.
 - d. The group reviewed a large printout of an aerial photo that was taken of the Nippon facility on August 1, 2024. See photos 387-388 in Attachment 1.
 - e. Mr. Wood, Mr. Mackey and Ms. Dumestre briefly reviewed the basic kraft recovery process steps for the inspectors, as shown on a chart. See photo 389.
3. Additional discussion followed, including:
 - a. Confidential business information (CBI) was discussed, and Mr. Wood and Mr. Mackey stated that they did not expect anything within the scope of the inspection to be considered CBI by Nippon. Photographs and videos were discussed, and it was agreed that the EPA inspectors would notify facility staff and that Ms. Dumestre would collect side by side photos or videos with the EPA inspectors. EPA forms regarding CBI were discussed, and I stated that I would provide these forms via email. The forms were emailed to Mr. Wood and Mr. Mackey on October 23, 2024 (see Attachment 4).
4. Additional process discussions occurred just prior to proceeding with the facility tour. These included the following:
 - a. The facility operates one Recovery Boiler (RB), also known as Boiler #10. Emissions from the RB are routed to three electrostatic precipitators, which operate in parallel. The RB also burns #6 "bunker C" heavy oil. Facility staff stated that the RB is good at sulfur recovery.
 - b. Emissions from the Hogged Fuel Boiler, Boiler #11 are routed to an electrostatic precipitator.
 - c. Emissions from the Smelt Dissolver Tank are routed to a Ducon Scrubber.
5. The opening conference ended, and the group proceeded to begin the facility walk-through at approximately 10:40. All four EPA inspectors and both Ecology staff participated in field portions of the inspection, over all three days. In general, Mr. Mackey and Ms. Dumestre escorted the six agency personnel throughout the inspection, although other facility staff joined certain portions of the inspection, as noted in this report. References to "the group" in this report mean that the six agency personnel were escorted by Mr. Mackey and Ms. Dumestre.

c) Field Observations – Morning of October 22, 2024

1. The group began to walk towards the Chip Silos. On the way, we observed the RB from a distance. The Chip Silos and Boiler #11 stack were observed.
2. We entered the Fiberline Control Room and met with Diana Wilson, Fiberline Manager. Ms. Wilson showed us the Fiberline Process Overview screen on a computer screen, explaining that the facility was switching campaigns from hardwood to softwood. On the screen, process vessels containing softwood product were represented by the color red, while those containing hardwood were colored yellow. See photo 393. Ms. Wilson explained that the facility was switching to softwood in order to produce pulp that would be sent to the Pulp Dryer Line, aka the “PDL Machine”.
3. While in the control room, Mr. Mackey explained that the NCG Incinerator exhaust is vented through the RB stack.
4. The group next walked to the Chip Bin building. On the way, we passed by the Brownstock Washer. At the level at the top of the Chip Bin (the top floor of the building was one level higher, as described below), we noted the pickup line to the HVLC system on the Chip Bin. See photo 395. I also noted a small bypass line on the HVLC line, equipped with an tag for Leak Detection and Repair (LDAR). See photo 396.
5. As we climbed the outside stairway to the top level of the Chip Bin building, I observed significant visible emissions from the top of the Bleach Plant D2 Tower. See photos 397-398 and videos 258, 259, 260, and 398. Visible emissions appeared as vapor being emitted from the upper rim (perimeter) of the D2 Tower and from near a white-gray rectangular shaped unit on the top of the tower. This rectangular white-gray unit was later identified as the Vent Accumulator. The following purpose/description of the Vent Accumulator is included in the Bleach Plant Training Manual (see page 38 of Attachment 5): *“Any ClO₂ in the headspace of the D2 Tower is pulled by the Bleach Plant Scrubber Exhaust Fan through the Vent Accumulator to the Bleach Plant Scrubber.”* As the group observed the visible emissions from the D2 Tower, both Mr. Mackey and Ms. Dumestre stated that the quantity of emissions seemed abnormally high. Kelsey Brotherton of Ecology also stated she had not seen this much visible emissions from the D2 Tower in the past. Ms. Dumestre stated that Greg Bean (Nippon staff person) had conducted some type of emission measurements on the D2 Tower in the past. The visible emissions from the rim of the D2 Tower were intermittent puffs of vapor, while the emissions from the top of the D2 Tower, near the Vent Accumulator, formed a continuous plume of vapor. Another video was recorded showing similar emissions from the rim and Vent Accumulator at the top of Bleach Plant D1 Tower as well (see video 262). The D1 Tower is the shorter tower on the left in the video. The shorter tower in between the D2 and D1 Towers is the EPO Tower, which does not contain chlorine dioxide (ClO₂).

6. From the landing on the stairs, just outside the doorway to the top level of the Chip Bin building we observed visible emissions appearing as a vapor from a vessel identified by facility staff as an Oxygen Delignification process unit (see photos 400-401 and video 261). The visible emissions were observed from the top of the nearer, larger diameter unit. Later discussions with facility staff indicated that this unit contains unbleached pulp storage, and that the taller, smaller diameter unit on the left in the photos is the O2 Delignification process unit.
7. We entered the room at the top of the Chip Bin building. On this level, we observed the conveyor belt which delivers wood chips into a receptacle above the top of the Chip Bin. I observed visible emissions which appeared as vapor being emitted from the opening where the conveyor belt entered the receptacle enclosure and from various other openings in the enclosure (see videos 263, 264, and 265). While in this room, a strong odor of NCGs was noticed by both myself and Inspector Whyte. The enclosure at the top of the Chip Bin is equipped with an odd-shaped pickup line (see photo 441) that I later traced back to the Chip Bin vent line (discussed later in this report). The Chip Bin itself is vented to the HVLC system. There is no additional fan or other motive force that creates vacuum on the odd-shaped pickup line on the enclosure at the top of the Chip Bin. While in this room, Mr. Mackey stated that only fresh steam is used in the Chip Bin, and Kelsey Brotherton of Ecology stated that the facility is allowed to use flash steam in the Chip Bin.
8. Around 12:40, all six agency staff departed the facility for lunch.

d) Office Discussions

1. All six agency staff returned to the facility around 14:00 and met Mr. Mackey and Ms. Dumestre in the facility conference room.
2. The group discussed and reviewed LDAR and HVLC/LVHC diagrams that were provided by the facility personnel. During this discussion, I noted that the total flow rate collected by the LVHC system is around 150 actual cubic feet per minute (acfm).
3. The group returned to the field around 14:20.

e) Field Observations – Afternoon of October 22, 2024

1. The group proceeded to the Chip Bin building to continue the general tour of the facility processes. On the way, we noted liquid which appeared to be water pouring off the top of the D1 Bleach Plant Tower. See video 266. Neither Mr. Mackey nor Ms. Dumestre knew the cause of this liquid. Returning to the Fiberline Control Room, I asked the operator on duty about the liquid we had observed. The operator stated that it was mostly likely “seal water” which is used to cool the bearings on the motor which powers the scaper inside the Bleach Tower D1. He stated that he would investigate the issue.
2. Leaving the Fiberline Control Room, the group returned to the Chip Bin building. While in the area of the Chip Bin, the HVLC vent line from the Chip Bin was

noted, equipped with a meter which measured the lower explosive limit (LEL) of the gasses inside the vent line (see photos 402, 403, and 404). I climbed a stepladder and observed the display which read between 15-20% LEL during the time I observed it. Mr. Mackey stated that if this meter measures 80% LEL or higher, the bypass line is automatically opened. The release stack for the HVLC system was observed later in the inspection, and is shown in photos 409 and 440.

3. While in this area, Inspector Whyte observed visible emissions appearing as vapor from Overflow Hatch 5 on Blow Tank 5 (see videos 267-268). Inspector Whyte spoke with Ms. Dumestre regarding the visible emissions observed. Ms. Dumestre explained that each Blow Tank has five Overflow Hatches, and all are inspected on a monthly basis. Inspector Whyte asked if the visible emissions they were observing would pass the monthly inspection, and Ms. Dumestre stated the visible emissions would not pass inspection. The HVLC vent line from Blow Tank 5 is shown in photo 405.
4. This location served as a good overview point to observe other process units and ducts at the facility. The following were observed, as shown in the cited photos:
 - a. O2 Delignification – photo 406.
 - b. Brownstock Washer process tanks – photo 407.
 - c. HVLC collection ducting and former bypass release stack – photo 408.
 - d. New HVLC bypass release stack – photo 409.
 - e. Hogged Fuel Boiler exhaust duct, ESP, stack – photo 410.
5. Returning to the Fiberline area, we again passed by the Brownstock Washer. Mr. Mackey explained that the other process units in this area are the Oxygen Press Washer and the Compaction Baffle Washer, which is a “pre-bleach” washer. These units are shown in photo 411. During this and other brief observations, I did not observe any visible emissions from these three process units.
6. At around 15:30 we returned to the Fiberline Control Room and I checked in with the operator I had spoken with earlier regarding the liquid we had observed spilling off the top of Bleach Plant D1 Tower. The operator stated that he had investigated the issue and confirmed the liquid was “seal water” that is overflowing.
7. The group then proceeded to walk through the “L3” Paper Machine building. In this area of the plant, we observed the “Extruders” which electrically melt polyethylene “nurdles” to form a sheet that is then joined to a paper sheet. Mr. Mackey explained that the melting occurs at around 600°F. There are several extruders, which are all vented directly to atmosphere with the exception of Line 6, 6.2 “gloss side” extruder, which is vented to a CECO filter.
8. We then walked to the Pulp Dryer Line (PDL) building, located in a new building in the western portion of the site. On the way, I took photos 412-413 showing the Recovery Boiler, ESPs, and exhaust stack. The PDL building is shown in photo 414. The PDL resembles a modern paper machine and dries pulp for offsite shipment.

9. On the way back to the office from the PDL, the group briefly observed the Lime Kiln (see photos 415-416).
10. After briefly returning to the facility conference room, the EPA inspectors departed the facility around 17:20.

4. Inspection Elements and Field Observations – October 23, 2024

a) Arrival and Office Discussions

1. The EPA inspectors arrived at the facility around 08:30, checked in at the security building, and then proceeded onsite. We met Mr. Mackey, Mr. Wood, and Ms. Dumestre at the facility conference room.
2. A brief discussion occurred regarding the records EPA would be requesting as part of the inspection. I created a shared OneDrive folder and started drafting the records request list.
3. Around 09:30, the six agency staff along with Mr. Mackey and Ms. Dumestre proceeded to the field.

b) Field Observations – Morning of October 23, 2024

1. The group proceeded to the Recovery Boiler (Boiler #10) area of the plant. On the way, we briefly observed the #7 Multiple Effects Evaporator (MEE) and High Solids Crystalizer (HSC) units, which are located adjacent to the RB (see photos 417-418). At the RB, we met with Kevin Aldrich (Process Owner, Recovery with Nippon). Mr. Aldrich escorted the group on a walk-through of the RB.
2. During the walk-through of the RB, I observed and/or recorded the following:
 - i. The RB is equipped with continuous emissions monitoring systems (CEMS) for nitrogen oxides (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), as well as a continuous opacity monitoring system (COMS).
 - ii. Inspector Whyte checked the calibration gasses for the RB CEMS and found that none were expired.
 - iii. The RB has both forced draft (FD) and induced draft (ID) fans. The RB is a negative pressure boiler; it operates under a vacuum.
 - iv. During our walk-through, I did not observe any visible emissions leaks from any cracks or openings in the RB.
 - v. Emissions from the RB are routed through three, 4-field electrostatic precipitators (ESPs) which operate in parallel. The third ESP was installed in 1995 due to a boiler expansion project that increased the flue gas from the RB.
 - vi. From an outdoor walkway at the RB/ESPs, the following processes and units were observed.
 1. #7 MEE and HSC – photos 420-422.
 2. “Old” natural gas boilers – photo 423.

- vii. On a lower level in the RB building we observed the black liquor “gun ports” where black liquor is injected into the RB. I did not observe any visible emissions from the “gun ports”. See photos 424-426.
 - viii. Adjacent to the RB, the #7 MEE units were examined, and several small vent lines were identified, referred to as “dome vents”. See photo 427. Each dome vent line observed by the EPA inspectors had a manual valve and a threaded plug, but did not have “car seals” or equivalent.
 - ix. In the basement of the RB building, we observed the Smelt Dissolver Tank (see photo 428).
3. As the group was leaving the RB building, we briefly observed the NCG Incinerator. While in the area of the NCG Incinerator, I noticed a strong odor of NCGs. Mr. Mackey explained that the NCG Incinerator burns NCGs, methanol, and turpentine. Emissions from the NCG Incinerator are vented to a caustic scrubber. A bleed stream from the caustic scrubber is routed to the Smelt Dissolver Tank.
 4. Next, the group briefly walked through the “old” natural gas boilers, led by Mr. Aldrich. These boilers are designated Boilers 7, 8, and 9 and all operate at 600 pound per square inch (psi) steam, as does the RB. Mr. Aldrich noted that the Hogged Fuel Boiler (#10) operates at 1,250 psi steam.
 5. Around 11:50, all six agency staff departed the facility for lunch.

c) Field Observations – Afternoon of October 23, 2024

1. The six agency staff returned to the facility around 13:00 and met with Mr. Mackey and Ms. Dumestre at the facility conference room. The group proceeded to the Lime Kiln, where we met with Eric Maxey, a member of the facility operations staff, who led us on a walk-through of the Lime Kiln.
2. During the walk-through of the Lime Kiln, I observed and/or recorded the following:
 - i. I observed visible emissions in the form of dust from an enclosed conveyor which was transporting lime dust from the ESP catch hopper into the Lime Kiln (see photos 430-431 and video 430). I pointed out the visible emissions to Mr. Maxey, who stated he would get the leak causing the visible emissions repaired.
 - ii. In the Lime Kiln process area, the group observed the ECHO filters. I observed visible emissions in the form of vapor from cracks, seams, and hatches at the top of the ECHO filters. See video 432. Mr. Maxey informed the inspectors that the function of the ECHO filters is to separate white liquor from lime mud. The ECHO filters use filter socks which appear similar in shape to baghouse bags, but are generally smaller (see photo 433).
3. The group departed the Lime Kiln area and walked to the Hogged Fuel Boiler (Boiler #11) area around 14:15, where we met with the Process Owner, Drew Zandi, who led us on a walk-through of the Hogged Fuel Boiler.

4. During the walk-through of the Hogged Fuel Boiler, I observed and/or recorded the following:
 - i. Emissions from Boiler #11 are first routed through a multiclone, followed by Trona injection, then the ID fan, which pushes the gas stream through the ESP.
 - ii. I observed the Trona storage silo as well as the twin injection points upstream of the ID fan.
 - iii. Inspector Whyte observed visible emissions in the form of dust from one of the Boiler #11 ESP hopper screw conveyors (Conveyor C1), see video 270.
 - iv. An outage of Boiler #11 is scheduled for November 8, 2024. Planned activities during the outage include replacement of the ID fan, boiler tube testing, and ESP internal inspection. Mr. Zandi also stated that the visible emissions leak on Boiler #11 ESP hopper screw conveyor C1 would also be fixed during the outage.
5. The group completed our field walk-through for the day and returned to the facility conference room around 15:15.

d) Office Discussions

1. In the facility conference room, the EPA inspectors conducted records review. Inspector Whyte examined process flow diagrams related to the Bleach Plant, and I examined the Monthly and Annual NCG inspection records. Mr. Mackey and Ms. Dumestre provided access to these records. Mr. Wood checked in during the records review.
2. In his review of the Bleach Plant diagrams, Inspector Whyte identified a block flow diagram that indicated that ClO₂ was added to the stock stream just prior to it entering the EPO Press. This would have been a concern, since the EPO Press has no emissions collection. However, subsequent review and discussion as well as observations in the field established that the ClO₂ is added to the feed after the EPO Press.
3. During my review of the Monthly and Annual NCG Inspection records, I recorded the following:
 - i. The September 2024 Monthly and Annual inspection does not include actual instrument readings for volatile organic compounds (VOC) for each component. Instead lines are drawn down many columns indicating that the readings did not change throughout the entire inspection of many components (see Attachment 6).
 - ii. In the September 2024 report, component "PVB-26001", which is the Pressure Vacuum Breaker on the "White Liquor G Tank" had a leak measured at 1,041 ppm (see page 33 of Attachment 6). In looking back through the reports, this same component was identified with a visible emissions leak during the December 2023 monthly inspection (see page 33 of Attachment 7). I spoke with Ms. Dumestre regarding this issue and asked why this leak was not repaired during the major plant outage that

had occurred during May/June 2024. Ms. Dumestre explained that that specific tank had not gone out of service during the 2024 outage. She also provided an email dated September 23, 2024 from Derek Schlack (Energy & Utilities Process Owner, Nippon) which describes the issue (see Attachment 8). The White Liquor G Tank has been added to the facility delay of repair list, and may be taken out of service during the 2025 plant outage.

4. Mr. Wood checked in with me regarding the closing conference, and it was agreed to schedule the conference for 15:30 on the following day in order to allow facility leadership to attend.
5. The EPA inspectors departed the facility around 17:00.

5. Inspection Elements and Field Observations – October 24, 2024

a) Arrival and Office Discussions

1. The EPA inspectors arrived at the facility around 08:30, checked in at the security building, and then proceeded onsite. We met Mr. Mackey and Ms. Dumestre at the facility conference room. We were also joined by Greg Bean, Senior Environmental Engineer with Nippon.
2. Just after our arrival, Mr. Mackey noted that the facility did not conduct monthly NCG inspections in April or May of 2024 due to the facility outage.
3. A discussion occurred regarding the visible emissions appearing as vapor that the inspectors had observed being emitted from the D1 and D2 Bleach Towers. The following notes were recorded by myself and Inspector Whyte reflecting information provided by Mr. Bean during this discussion:
 - i. Mr. Bean stated that he has not looked at the Vent Accumulators for a while, but doesn't remember seeing much visible emissions from them in the past. He stated that the D1 and D2 Bleach Towers are supposed to operate under vacuum, with "puffs" of positive pressure. Based on his memory of the equipment configuration, possible sources of visible emissions include an opening around the rim of each Tower where the roof or lid was raised as part of initial efforts to comply with 40 CFR 63, subpart S. Additionally, visible emissions could be released from the Vent Accumulators.
 - ii. Inspector Whyte noted the following:
 1. Greg Bean stated that they had diluted the headspace of D1 and D2 to meet the 10 ppm chlorine requirement.
 2. Greg Bean thinks he remembers that headspace testing prior to opening the lid gap was over 10 ppm, and that they "weren't going to be able to comply without diluting the headspace".

b) Field Observations – Morning of October 24, 2024

1. The group proceeded to the field around 09:15 to return to the Bleach Plant for additional discussions and observations related to the D1 and D2 Bleach Plant Towers. Mr. Bean did not accompany the group into the field.
2. In the Bleach Plant conference room, the group met with Lane Spenker, Digester and Brownstock Process Owner with Nippon.
 - i. During this discussion, the EPA inspectors explained our observations of visible emissions from the top of the D1 and D2 Towers, and asked if Mr. Spenker could help us understand the function of the Vent Accumulators. It was during this discussion that we learned of the function of the Vent Accumulators and positively identified them as the white-gray rectangular units on the top of the D1 and D2 Towers.
 - ii. Mr. Spenker showed us several diagrams and pictorial depictions of the D1 and D2 Towers in the Bleach Plant Training Manuals for the process equipment. The Manual for the D2 Stage is included as Attachment 5.
3. Around 09:45 Mr. Spenker accompanied us on a follow-up walk-through of the D1 and D2 Bleach Plant Towers. During the walk-through, the following describes observations made by either myself or Inspector Whyte, as noted:
 - i. The group, along with Mr. Spenker, first took the elevator to the top of the EPA Tower. From the catwalk leading across the EPA Tower to the D1 Tower, I observed a continuous plume of visible emissions appearing as a vapor being emitted from the bottom gap around the Vent Accumulator at the top of the D1 Tower. The plume varied in terms of intensity and volume. Additionally, I observed intermittent puffs of visible emissions appearing as a vapor being emitted from the perimeter gap around the top edge of the D1 Tower. See photos 436-439 and videos 271-273.
 - ii. I identified the pickup line collecting emissions from the D1 Tower routing them to the Bleach Plant Scrubber, yet I observed significant visible emissions being emitted from the D1 Tower as noted above.
 - iii. Inspector Whyte took the elevator to the top of the D2 Tower along with most members of the group, with the exception of myself and Kelsey Brotherton of Ecology. Inspector Whyte recorded video 274 which shows a continuous plume of visible emissions appearing as a vapor being emitted from the bottom gap around the Vent Accumulator at the top of the D2 Tower. The volume and intensity of the plume was greater than that observed from the corresponding location on the D1 Tower. Additionally, the video shows lower volume visible emissions appearing as a vapor being emitted from the perimeter gap around the top edge of the D2 Tower.
 - iv. Discussion with Mr. Spenker confirmed that chlorine dioxide addition into the stock stream occurs after the EPO Press. Inspector Whyte and I visually confirmed the ClO₂ injection point on Press #2. At this point, Mr. Spenker returned to other duties.

4. The group returned to the Chip Bin area of the plant. The following observations were recorded by myself and Inspector Whyte:
 - i. Inspector Whyte recorded video 276 showing visible emissions appearing as a vapor being emitted from the rim gap and Vent Accumulator at the top of the D2 Bleach Plant Tower.
 - ii. In the room at the top of the Chip Bin building, where chips enter the top of the Chip Bin through an enclosure, I experienced a very strong NCG odor. Checking with others, including Inspector Whyte, the odor was confirmed.
 - iii. Inspector Whyte climbed to the top of Blow Tank 5, which is accessed through nearby catwalks. While on Blow Tank 5, he recorded videos 278 and 279, which show visible emissions appearing as a vapor from Blow Tank 5, Overflow Hatch's 4 and 5 and from the "pressure relief lid" on top of Blow Tank 5. Photo 277 shows the "pressure relief lid", and photo 280 shows Blow Tank 4, Overflow Hatch 5. Blow Tank 4 was not in operation at the time.
 - iv. In the Chip Bin building, I visually traced the odd-shaped pickup line on the enclosure at the top of the Chip Bin (shown in photo 441). The pickup line passed through the floor of the room into the room below, where it entered the elbow of a larger diameter vent line on the Chip Bin (see photos 444-445). The larger diameter vent line was equipped with a weighted butterfly valve that swung freely. On the other side of the butterfly valve, the vent line released directly through the wall to atmosphere (see photo 447). The HVLC pickup line on the Chip Bin was also noted (see photo 446).
5. The group met again with Mr. Spenker briefly in the Bleach Plant conference room. The following information was noted at this time:
 - i. The Pressure Diffuser is a stage of washing prior to the Blow Tanks.
 - ii. The pressure at the top of the Pressure Diffuser is around 60 psi, while the digester pressure is around 135 psi. The Pressure Diffuser releases to the Blow Tanks, which are at atmospheric pressure.
 - iii. The Flash Tanks contain liquor extracted from the digester.
 - iv. The facility usually only uses one Blow Tank at a time, with the second Blow Tank being available for overflow.
6. Shortly after this meeting, all six agency staff departed the facility for lunch.

c) Office Discussions

1. The six agency staff returned to the facility around 13:30 and met with Mr. Mackey, Ms. Dumestre and Mr. Bean in the facility conference room.
2. A discussion of liquid condensate streams at the facility occurred, and I recorded the following notes:
 - i. Discussion with Ecology staff had indicated that the facility has a practice of releasing condensate streams to the sewer when the steam stripper is down. Mr. Mackey confirmed that this is the case.

- ii. The facility uses a 60-day averaging period to comply with the 10.2 pounds of methanol per ton of dry pulp production limit contained in 40 CFR 63, subpart S.
- iii. The facility uses a mass flow & density monitor to measure and calculate the methanol that is sent to the NCG Incinerator.
- iv. Mr. Mackey stated that he is not sure if there is an established Standard Operating Procedure (SOP) documenting these condensate practices. The facility does have a spreadsheet that calculates the rolling 60-day methanol number and a Word document that describes the calculations. I added these files to the EPA inspection records request (see Attachment 9). Mr. Mackey stated that the spreadsheet pulls data from Pi (the facility data acquisition software) and performs the calculations using real time data.
- v. In discussing the condensates systems with Mr. Bean, he stated that many NCG condensate sources throughout the facility have the ability to be released to the sewer right at the source. One example is the Lime Kiln NCG condensates steam can be released to a trench sewer as a backup option. Additionally “D Sump” is an open sump where condensates are released to an open sewer from a sealed piping system.
- vi. I requested P&IDs of the condensates system, and added these to the EPA inspection records request. I also took photo 448 of page 20 of 21 in a Weyerhaeuser document describing the condensates systems at the facility.
- vii. Inspector Whyte noted that the facility does not have flow meters for condensate streams entering condensate tanks. There are also no flow meters that measure the quantity of condensates that are released to sewer.

d) Field Observations – Afternoon of October 24, 2024

- 1. Around 14:20, the group proceeded to the field to observe some of the condensate sources and sumps. Again, Mr. Bean did not join the group in the field.
- 2. The group first observed “D Sump”, which is an open sump with several pipes releasing liquid into the sump.
- 3. Next the group walked to the Combined Condensate Tank. I observed a drain line from this tank labeled “Contaminated Condensate” (see photo 450). The drain line had a tag attached that read “Combined Tank to Sealed Sewer”. I asked Ms. Dumestre where this drain line conveyed condensate to, and she stated it probably led to either “D Sump” or “A Sump”, but she was not sure which. I photographed a similar drain line on the Foul Condensate Tank, which was adjacent to the Combined Condensate Tank (see photo 454).
- 4. While near the Combined Condensate Tank, I briefly observed the condensate line, component MV-33020, that is on the delay of repair list (see photo 453).

5. The group next observed “A Sump”, which is an open sump with several pipes releasing liquid into the sump. The sign for “A Sump” read “A/C Sump”, but Ms. Dumestre stated that the facility refers to this as “A Sump”. See photos 455-456.
6. The group briefly walked back to “D Sump” so I could take a couple of photographs (457-158).

6. Closing Conference – October 24, 2024

- a) The closing conference was held beginning around 15:30 in the main facility conference room, located in a different building. I led the discussion, including providing an overview of the EPA Region 10 compliance process.
- b) Attendees: see Attachment 10. Note that the following agency personnel attended the closing conference, but did not sign the attendee list:
 1. Trey Peterson – EPA Region 10
 2. Alex Liebert – EPA Region 10
 3. Kelsey Brotherton – WA Dept. of Ecology, Industrial Section
 4. Emily Toffol – WA Dept. of Ecology, Industrial Section
- c) The following issues were identified as potential compliance concerns under the CAA. I clarified that these items did not necessarily constitute violations and may not include any additional compliance concerns that are identified post-inspection.
 1. Lime Kiln – visible emissions (dust) observed from conveyor carrying ESP catch to Lime Kiln.
 2. Lime Kiln – visible emissions (vapors) from the ECHO filters.
 3. Boiler #11 – visible emissions (dust) from the ESP hopper screw conveyor.
 4. Bleach Plant – visible emissions (vapors) from the top of the D1 and D2 Bleach Towers.
 5. Blow Tanks – visible emissions (vapors) from the overflow hatches and the pressure relief lid.
 6. Condensates – the practice of releasing condensate to sewer.
 7. Delay of repair issues continuing after a major plant outage.
 8. Some LVHC sources vented to HVLC system, while HVLC system has no backup control device.
 9. Small bypass lines without car seals or equivalent. Example - #7 MEE dome vents, and the Chip Bin HVLC line.
 10. Visible emissions (vapors) from the enclosure at the top of the Chip Bin where chips are added via conveyor belt.
- d) The closing conference ended around 16:20. After a brief meeting with Mr. Mackey, Ms. Dumestre, and Mr. Wood in the original conference room to complete discussions regarding the EPA inspection records request, the inspectors departed the facility around 16:30.