

**Neighborhood Advisory Committee**  
**April 25, 2014**

**NAC Members Present:** NEDC: Aubrey Baldwin; NCA: Tom Giese, John Krallman; NWDA: Bob Amundson, Sharon Genasci.

**Not Present:** NCA: Mary Peveto; NWDA: Bob Holmstrom.

**ESCO Representative:** Travis Quarles.

**Other Attendees:** Shannon Huggins, Kat Robinson, ESCO Corporation; Kathy Sharp, NWDA

Meeting called to order 9:06 AM.

**1. Welcome and Introduction.**

Kathy Sharp announced that she was recently approved as an alternate NWDA member.

**2. Planning for Annual Tour.**

Aubrey Baldwin asked about the annual tour. Travis Quarles offered several dates and times. After some discussion, Baldwin suggested a Plant 3 tour in the afternoon, followed by an optional evening tour of the Main Plant.

**3. Annual Report Presentation and Discussion**

Quarles presented the annual report. He discussed ESCO's 100<sup>th</sup> anniversary celebration and changes to the Engineered Products group structure. He described the new Innovation Center near the Slinger Bay.

The next section summarizes air emissions, which were reduced due to decreased production. Various construction projects were completed. A lime silo was hooked into an existing dust collector to capture emissions from filling the unit. This was reported as a deviation because DEQ was not notified before making the change. The Upper Core Room switched to a High Volume, Low Pressure (HVLP) gun to reduce overspray of core wash. A previously unused dust collector was connected as welding support in the fabrication department. Quarles also gave an update on all GNA projects. Two new dust collectors were installed in the Doghouse, and the low phenol binder substitution was completed at Plant 3. The goal was 30-40% reduction, and DEQ approved the report of 70.5% reduction. Genasci asked if the new binder contains phenol. Quarles explained that the material contains a slightly different mix with very little free phenol so emissions are much lower.

Genasci described an odor about which she recently filed a complaint, saying it was horribly smoky and didn't have the healthful feeling of wood smoke. Baldwin located Genasci's complaint in the log, and the group reviewed the complaint. Krallman suggested the odor could have been from other industries in the Northwest District. Genasci said she has smelled the odor for many years and knows that it's from ESCO. Kathy Sharp added that the phenol reduction is calculated by math and not measurements. Quarles explained that the reduction was measured and based on an emission factor based on the measurements, and ESCO's Title V air permit specifies the method of calculation. Horizon Engineering, the NAC's approved tester, came to the meeting in January to answer questions about the test.

Genasci described several neighbors who were astonished they weren't notified of the constant odor before moving to the area. Sharp said there are a lot of complaints considering the improvements. Huggins noted that we are only a few years into the GNA. ESCO has been working diligently and going above and beyond to address the NAC's concerns whenever possible. ESCO was honest about odor from the beginning, explaining that the odors from a metal manufacturing facility will never completely go

away. Genasci asked why the project to improve the Slinger Bay hasn't started. Baldwin explained that the project is due in 2017, and the idea was to complete other projects first.

Baldwin asked about bag leak detection. Quarles described Project #7, bag leak detection probes on several dust collectors. Krallman asked if there have been any early warnings. Quarles replied that there haven't been any early warnings, but the bags are still new. Warnings may increase with time.

Quarles provided an update on all Attachment A projects. He described Project 1, the two new dust collectors added to the Doghouse. One dust collector serves the pouring area, and the second collector serves the last section of the Shakeout table. Krallman asked how the dust collected compares to reduced emissions. Quarles answered that the calculations are based on fugitive emissions so they are not directly comparable. Baldwin asked if the number represents emissions that would have left the building. Quarles explained that the Shakeout tray pushes air into the collector, so material that wouldn't normally leave the building is now collected. More is being captured than would have been emitted, so they're not comparable. Krallman said that the new collector increased capture efficiency, and captures more material than previously would have been emitted. Quarles agreed and said the Pouring Loop collector just doesn't see as much dust. There are fewer emissions directly from the pouring process compared to the longer cooling process.

Amundson asked several questions in an attempt to quantify the metals collected by the new collectors, but realized it was too complicated. Quarles explained that the material collected by the Shakeout collector contains very little metal. In addition to the weight tests, Horizon performed source testing on the stacks. DEQ will approve the results before they are provided to the NAC. Krallman asked if the results will be used to modify the emission factor. Quarles added that it hasn't been decided yet; several projects could be used to modify the emission factors and claim reductions.

Projects, 2, 3, 4, and 5 are complete.

Project 6 has an update. The sodium silicate binder trial in the Chain Room was not successful. Two other binders are being considered. Genasci asked if a copy of the chemical contents of the old and new binders could be provided, and Quarles agreed to after the switch is made.

Projects 7-12 are complete.

Project 13 is in progress and has been updated since submitting the annual report. Temperature will be measured in the exhaust stack of the thermal sand reclaimer, and the temperature will be correlated to oven activity. Initial testing will show if adjustments are needed to improve VOC destruction. Baldwin asked what kind of changes might be implemented. Quarles said the oven burner could be modified to increase the temperature of the sand, or an afterburner could be installed at the top of the oven to heat air as it enters the stack. DEQ suggests an exhaust temperature of 1200°F and residence time of 0.3 seconds, but literature offers a range of temperatures. Amundson asked if the percent VOC destruction could be reported to the NAC, and Quarles replied that measuring VOC destruction is very expensive. Amundson explained that he's not asking for measurements, but simply calculating the destruction efficiency. Quarles said that ESCO is planning to present calculations that are accepted by DEQ based on temperature measurements.

Project 14 has been updated since the annual report. Quarles and others observed the entire AOD process. Emissions are captured very well about 95% of the time, which is consistent with previous

consultant reports by ERM and Jim Karas. The AOD has a retractable hood that moves during the process. Ideas are being considered to modify the hood for better capture while tapping; a plan is being put together to evaluate the situation and implement any necessary changes. Quarles hopes to have a plan developed by the next meeting.

Project number 15 is complete.

Project 16 is in progress. ESCO has several processes to investigate safety incidents such as spills and fires. Baldwin asked if failing to turn on pollution control equipment would be investigated. Quarles said Project 16 would address that. The ERM and Karas reports noted conditions that generated more emissions than normal, such as an issue while pouring a heat. There are already procedures to address these incidents which can be adapted to satisfy the GNA.

Genasci asked if all complaints are investigated, and Quarles replied that DEQ and NWDA forward their complaints to ESCO to be entered into Ethicspoint. Managers are part of the complaint investigation process, but it's unusual to attribute a complaint to upset conditions. Genasci wished investigation included correcting the source of the odor. Quarles replied that odors are not typically due to an upset or breakdown, they usually occur under standard operating conditions. Sharp commented that it's tiring to complain regularly. She knows ESCO is making progress, but wonders if lower complaint volume is due to fatigue. Krallman explained that before the GNA, odor complaints were only investigated to determine if operating conditions were normal or upset. The new process helps ESCO pinpoint specific sources of odors to target emissions reduction efforts. Genasci said she wants to see advances made after complaints.

Quarles concluded by saying Project 17 has not yet been addressed.

Quarles reviewed the complaints received in 2013. Genasci commented on a complaint describing a non-ESCO odor and said it's hard to put odor into words. Huggins explained that certain odors are not from ESCO, such as burnt coffee from one of the nearby coffee roasters. Genasci interjected that everyone knows what cat urine smells like. Amundson asked to see a bottom line on the complaint explaining the likely source. Quarles explained that the bolded paragraph at the end of each complaint provides a summary. Krallman asked for another gray dividing bar to be added to the complaint log to make the concluding paragraph easier to identify. Quarles agreed and described the graphs.

Baldwin asked if any patterns are emerging from the complaint data. Quarles said most complaints are attributed to Plant 3 or the Doghouse. Baldwin noted the small number of complaints related to the Chain Room. Quarles said the Chain Room pours less than other departments, so it's a small source of odor. Amundson commented that total complaints dropped from 190 in 2009 to 55 in 2013. He is concerned that people are making fewer complaints than before.

Krallman suggested clarifying to neighbors that complaints are not meant to fix issues immediately, but to collect data on where odors are coming from. Baldwin said it's difficult to address reporting-fatigue, but it's important for everyone to keep reporting. Genasci said the burden is on ESCO to correct the odor. She has been experiencing odors for at least 15 years, and says ESCO knows which parts of the plant are causing the problem. She says people living near the plant can't possibly file a daily complaint.

Amundson cautioned everyone not to assume fewer complaints indicate fewer odors. ESCO runs a manufacturing process that creates odor, but is committed to using information from the neighbors to

figure things out. Krallman added that the sample size is too small to pinpoint or eliminate certain processes. He offered that the overall number is not as important as the distribution of complaints. The chart showing total complaints from 2009 to 2013 is not as valuable as the chart showing complaints broken down by process. Genasci wishes to see statistics on Parkinson's disease, Autism, and cancer.

Quarles summarized the deviation from connecting the lime silo at the AOD, and the issue on the Doghouse pouring floor that led to an enforcement case. Amundson had a final question about the annual report, asking for a disclaimer with the date the new complaint system was rolled out. Quarles noted that the report states the new complaint process began on May 1, 2012. Krallman asked if that could be reiterated on the charts, and Quarles agreed.

#### **4. Review ESCO and DEQ Communications**

Quarles reviewed recent communications with DEQ. Communication 1 is a minor permit modification request. The permit condition to source test the Main Plant EAF baghouse is impossible to fulfil based on ESCO's process, so the permit was modified with no material effect on the source test results. Communication 2 is DEQ's response nothing their receipt of the minor permit modification request.

Communication 3 is a letter from DEQ accepting the results for the phenol binder substitution at Plant 3.

Communication 4 is the annual report and semi-annual compliance certifications.

Communication 5 is a permit deviation. A dust collector inspection at Plant 3 was missed for January. ESCO submitted a deviation report and applied countermeasures, including implementation of a web-based task tracking system. Communication 6 is DEQ's acknowledgement of the permit deviation, with no further actions required.

Communication 7 is the pollution prevention report to DEQ; similar to the annual report provided to the NAC.

Communication 8 is a Notice of Construction Completion for the robotic grinding cell added to the Upper Finishing Department.

Before adjourning, Quarles brought up Multnomah County's and the City of Portland's Reverse 911. This is an important part of the Emergency Response Plan, and Huggins added that the survey results show neighbors don't understand it and therefore, distrust Reverse 911. It was agreed by the NAC and ESCO that having neighbors depend on an ESCO-led Reverse 911 is less desirable than depending on the City's. City emergency management officials are willing to visit neighbor groups and discuss Reverse 911. The NAC should decide whether to perform another survey or simply incorporate the city's Reverse 911 system. Krallman explained that the subcommittee concluded the only ESCO-related threat to the neighborhood is fire. Genasci asked about earthquakes, and Quarles replied that the main concern after an earthquake is a fire. Krallman reiterated that an ESCO specific Reverse 911 isn't necessary. Genasci asked if Huggins would provide information about how to sign up and advertise Reverse 911 so that she could post it on the NWDA website, and Huggins agreed.

The meeting was adjourned at 11:01 AM.