From: Mike Mazza
To: Jamen Jefferson; Jerome James; Kristi Hunt; MONRO David; Brozusky, Sandra; Hedgpeth, Zach
Cc: Andy Choate; Jason Heaton; Mikey Mazza; Xavier Upton; Yovav Gur-Ari
Subject: RE: EPA and DEQ inspection 09-24-15
Date: Friday, September 25, 2015 7:44:29 AM

Jamen,

First I cannot express how proud I am of you and your reporting of this inspection. Your attention to detail is exemplary, Your explanation of the process and procedure to the facility show how properly trained you are. This is exactly what I would have said, and just let you know I am also sending this to the EPA and DEQ people that were there during this inspection for their review. I am sure it was a bit stressful, as this was your fist time dealing with this type of inspection. Great Job!

Just to keep everyone posted on what happened after this:

I contacted Zach, we had a positive conversation with him. EPA has a lot of or rules about disclose of inspection and they have to fill out a lot of reports. It will take some time for them to finish their report. Zach did get the approval to share with us the thermal imaging so we can investigate these areas with Maul Foster. FYI Maul Foster is the company that does our storm water compliance. They also do emission testing and report. They are the perfect people to help us with any problems.

From: Jamen Jefferson
Sent: Thursday, September 24, 2015 10:47 PM
To: Mike Mazza <mmazza@apes-inc.com>; Jerome James <jjames@apes-inc.com>; Kristi Hunt <khunt@apes-inc.com>
Subject: EPA and DEQ inspection 09-24-15

I apologize in advance; by now you three probably understand that I am a detail oriented person and this account of the inspection is going to be rather lengthy. I will summarize as best as I can, however I do not wish to leave anything out that may or may not become important if brought up later.

NOTE: at all times below, the DEQ member had a hand held “sniffer” device to pick up odor or gas concentrations. The readings were automatically downloaded to a map or schematic of the site via GPS onto an Ipad. At all times either of the EPA team members was holding the imager device. At all times still pictures were taken by one EPA member.

At approximately 03:30 I finished switching and cleaning out the P1 strainer when I noticed a vehicle parked outside the gate with two gentleman looking through the gate. I approached them

and they showed my their credentials and introduced themselves as EPA and DEQ and told me that they were there to perform a full site inspection for leaks and odors. They asked if the plant was currently running and I told them that it was. I told them that I would meet them on the other side of the building and open the gate for them. I called Andy and told him that the EPA was here to perform an inspection. I allowed the team to enter and they started to gather up their gear and PPE. Andy came to the front and the team introduced themselves and gave Andy business cards for contact and showed him their credentials as well. The team requested that they be escorted around the site and to have the basic rundown of the whole process. I offered to be the "tour guide" for the team so that Andy could continue to monitor the process. The team needed a few more minutes to set up, so I told them to meet me outside of the Lab when they were ready to begin, at this time I did a double check on the front plant to ensure nothing would be pressing during the tour.

03:45-50 The team met me outside the Lab and asked me to introduce myself. They asked me what my title or position at APES was and how long I have worked here. The team explained to me that they wanted a full run down of the basic operations of the entire plant process as a whole start to finish to gain a better understanding of it to help identify areas that may be a concern for leaks or odors. They also wanted to know what Raw materials are brought into the facility and what our finished products were.

03:50-04:00 I began with the used oil as our primary Raw material. I explained that a large majority of it comes from the automobile services industry, but that we also collect or receive from a variety of sources; bilge oils, bunker oils, mixed flux and diesel oils. I explained that we also collect used anti-freeze and used oil filters but that they have no interaction with the plant processes front or back. I explained that the oils that are brought on site are pretested free of or below limits for Polychlorinated Biphenyls and that they are offloaded into the jail tanks. I told them that we do on site tests in the lab to check for flash points, API's, suspended water concentrations, chlorides, and solids. I told them that we then send oil samples out to a third party to re-test for PCB's. I told them that once we know that a holding tank has tested PCB free and that the oil meets our requirements for processing it can then be moved into a cook tank for preprocessing. I told them that oil that had been heated in a cook tank was then sent to the back plant and that the finished products were N100 or light lubricant, N200 or heavy lubricant, flux or asphalt cutter, light ends or diesel cut, and that the byproduct was waste water. I told them that we mixed the light and heavy lubes to make MDO as our main finished product. I told them that we also sell our flux and that our light ends or diesel cuts are used to fuel our front and back burners. I told them that we collected the process water and give it to Orrco and that Orrco does large scale industrial water processing to remove fuels and glycols from water.

04:00-04:10 I explained the cook tank rotations, the filling and heating process, start samples to determine acid concentrations, and caustic additions. I explained the monitoring of the temperatures and the range that we maintain and to not exceed 250 degrees. I explained the basics of the burner operation and the thermic system and when thermic is turned on or off for cook tanks. I explained the effect initial water concentrations can have on heating up a cook tank and that it is not a set rotation. I explained the max height for fills to allow for thermal expansion and proper collection of gases and vapors into the R-700 condensing unit. I explained the basics on

the R-700 unit operation with the cook tanks and the collection totes and where the condensed water and light ends go once collected in the totes.

04:10-04:15 One of the EPA team members showed me on a thermal imager designed to visualize organic vapors and compounds. The team member showed me the invisible plumes that were venting out of the R 700 condensing stack attached to CT-4. We agreed that there was nothing to see with the naked eye, but on the imager there was defiantly something venting. The same team member wanted to get up on top of the cook tanks to do an analysis of the vapors and I asked him if he had a safety harness. He then declined to check because he did not want to bother putting a harness on.

04:10-04:35 The team members and I walked between the cook tanks. The EPA members asked me if I was aware of the odor complaints and I told them that I was aware. They told me that the smell between the cook tanks was the smell that they were looking for or at least smelled the same. The team members noticed that Cook Tanks 2 and 3 had buckets under the dry legs, they asked why this was. I told them that they did not work properly and that the reason why had not been explained to me. I explained to them how the DP cells worked and what the Wet leg and Dry/Reference legs were for and explained that at times when a cook tank is feeding but still losing water and lights due to heat that the DP cells can give us false readings and that the Dry/Reference legs need to be opened. One of the EPA team members wanted to check for vapors coming out of the Cook tank 3 dry leg and I explained that mostly water would come out, I opened the dry leg and showed him, he then decided not to test because he did not want to chance damaging his sensor with liquids. The team members checked the R 700 collection totes for leaks. To my knowledge they did not see any leaks on the imager from the totes, but did note the smell from the totes and that liquid was building up around the lids. They asked if I knew what the buildup was from, I explained to them that the automatic pump down of the totes stopped working a few months ago and that when the lids were taken off in an attempt to fix the float switches and level sensors that the gaskets were replaced. I also knew and did say that the gaskets used to replace the old ones were much smaller and only about a 3rd of the width that the original gaskets were. The team then asked about the front plant condenser tower, I told them it was auto-filled with city potable water and drove the condensing operations for the cook tank process. The team then asked me again how long I had worked here. They also asked about the work schedule and rotation.

04:35-04:45 The team and I walked into the lot towards the back plant just passed the loading pad. One of the EPA team members then used the imager to scan the plant as a whole. They were concerned and asked about all the vapors that they could see with the naked eye behind the process but could not see on the imager. I told them that what they were seeing was steam coming from the back plant back-up cooling tower. They asked if it was just water and whether or not it had chemicals in it. I told them that originally there was a pH balancing and treatment system for the water in the back plant cooling system to prevent algae growth and condenser fouling but that to my knowledge it had been down for at least a year. I told them that to my knowledge that the company was making tentative plans to reintroduce treatment, but that it was most likely simply city potable water like the front plant condenser tower. They were not appeased and decided to walk out to the Storm water Separator basin to get a better look with the imager. After some debate between one EPA team member and the DEQ member they concluded that it was in

fact just steam as I had said.

04:45-04:55 The team and I walked to the front of the UO farm. While we walked the wind direction changed and a gust of wind carried some of the back plant burner exhaust towards us. The whole team wanted to know immediately what that smell was and I told them it was the burner. They asked me to explain again what the fuel was that we used in our burners and to clarify whether or not it was a finished product. I told them that we collect light ends or a diesel cut from the Cook Tanks and The Flash Tank and that it is collected along with water and sent to WLE-1. I told them that once WLE-1 has reached a determined height, that we first removed the water that has separated to the bottom of the tank and then send the light ends into one of two storage tanks. I told them that we then at a minimum of twice a week, or when needed we send out fuel samples to a 3rd party Lab to determine sulfur content. I told them that once we get results back we then mix a portion of our light lubricant into the light ends to bring total sulfur concentration down to ensure it is well below the limits for our air permit. I also told them that there are times when no mixing of light lube is necessary because sulfur concentration is already well below limits.

04:55-05:10 One EPA team member asked for a more detailed explanation of the back plant process in full. He asked me to be slow and step by step so that he could take notes. I told him that from the cook tanks, oil came through a two inch feed line all the way to the back plant. I explained to him and to the other team members that this oil was fed into the bottom of HE-1 above the WFE-1 feed line and preheated then sent into the flash tank. I explained that the Flash Tank is under heavy vacuum and very hot and that oil when introduced, light ends and any remaining water are allowed to almost immediately turn into vapors and are then sucked up threw the mechanical filters in the Column and then pulled into the R6 and then pumped into WLE-1. I explained P-3 and the 8 ft per second rate it circulates flash tank oil threw HE-1 and that the discharge pressure from P-3 coupled with vacuum from WFE-1 moves oil at a rate controlled by an auto feed regulation valve into WFE-1. I explained what a wiped film evaporator was and told them that they are used in industries ranging from fruit juices to oil refinery processes. I told them that the oil is fed into the tops of the WFE's and that a hollow rotor spins around a central condenser unit and spreads a thin film of oil onto the inner shell by the aid of wipers. I explained that the vacuum in the WFE's is very high and that it brings the latent heat of vaporization down to a level where the oil can evaporate off of the inner shell and reach the inner condenser. I told them that lighter oil evaporates first and is condensed and falls down the center to be collected in a receiver and that heavier oil stays on the shell and falls via gravity to be collected in a second receiver. I explained WFE-1's roll in separating out and collecting N100 and that WFE-2 separates out the N200 and that whatever is left over in WFE-2 is collected as flux. I then explained the orientation of the IT farm and the storage tanks.

05:10-05:20 The team and I moved to the MDO transfer pump so that the plant could be seen from a different angle by the imager. I showed them the Vac skid and explained the single liquid ring pump for the Flash tank or front end vacuum and the 2 blower plus liquid ring pump for the WFE's. I pointed to the 404, 402 receivers and explained their operations and said that all the vapors or gases that are pulled when bringing vacuum down are discharged into the R400 and those gases and vapors are sent to a mechanical filter then to flame arrestors and then finally to the burner. The team asked if there were any parts to the process that would vent or leak as part of normal operations and I explained that the system is entirely enclosed because it heavily relies on

vacuum to work properly. I said that if and when we see leaks, we can immediately tell, and that the only normal operation venting should be the burner. They asked about the smell near the MDO transfer pump and I told them that it more than likely was from cleaning flame arrestors. A team member looked at one of the buckets containing used rags from a flame arrestor change out and agreed that the smell was horrid.

05:20-05:35 The team wanted to take a few shots with the imager from the main process floor by P-3 and the process sump. One EPA member said it was a lot to wrapped his head around and wondered if there was a display or diagram. I offered to bring the team to the Lab and show them the front plant and back plant screens. The team and I made our way to the Lab and I showed them the front and back plant HMI's. One EPA member took photos of all the screens for later reference. On all screens I traced the process and re-explained the operations. On the page for the Vac Skid, one team member asked what the go to carbon button was for. I explained that if R400 internal pressure rises, we know that something is wrong with the vent line, and that there is not a clear path to the burner. I told them that if that happened, that it was flame arrestors that needed to be replaced. I told the team that we have replacement flame arrestors that are clean standing by along with tools prepped so that in the event we need to go to carbon, that we can with both operators swap to the clean flame arrestors and that the evolution takes on average 5 min and is a simple evolution that wouldn't exceed 10 min. They asked if we had a carbon barrel installed and if so could they see it.

05:35-05:45 The team and I walked back to the process and I showed them the new carbon barrel. I told them that it was a fresh barrel a few weeks old. The team asked if we could get them swapped out when needed and I said yes and the team nodded in approval after giving it a quick glance. The team members asked me if I had any questions about the inspection. I asked if I needed to have any members of management call them or their agencies. They told me no, and that they were just going to write up their own reports and send them up to their supervision. They thanked me for showing them around and said it was a very pleasant experience. We shook hands and I escorted them to their vehicle and told them how to exit the gate and wished them a good day.

05:45-05:55 I have a much needed cigarette and the team drove away at 5:55am

I believe that the only main concerns the team walked away with concentrated on the cook tanks, specifically R 700 vent line and poorly sealed totes. If they had any other major concerns they did not share them with me, however I doubt there were any because of their willingness to discuss findings up front. They also walked by the R400 twice and had no idea it had obvious issues. Please ask for any elaboration or clarification.

Respectfully,

Jamen