

Cliffside Refiners Limited Partnership Meeting

February 6, 2018 @ 10:00 AM

Attendees:

Sam B. Joan G. Brock V. Nick D. Mark M. Barry S.
Randy P. Mark C. Melissa H. Alex C. Nick H. Rick G

I. Call to Order

II. Roll Call: Roll call was taken

III. Open Issues – Follow up concerning Upcoming Shutdown in March

- **Sam** – the purpose of this meeting is to conduct a follow up, because, we did not have all the information in our previous meeting.
- Nick, it looks like there are some additional items that we had talked about that we thought would be taken care of during the March outage. I do not know if it has been forwarded to you, and, it looks like they are not on the list.
- Nick, can you tell us again what you are planning to do during the March outage. There were several days that were taken off for some reason. We just want to know what we are doing for the March outage.
- **Nick D.** – The list is still the same it has not changed. The only thing that was deferred was the K600 oil leaks.
- All other items such as the well valve tuning, critical safety, orifice plates , K100, DCS booster, electrical distribution system, tie ins, general PF for the K600, compressor air cooler, residue gas, nitrogen purge gas tie ins for the C100.
- Hopefully, when you met with Brad Beckley on Friday, you discussed all the other items.
 - **Sam** - Brad statement was he was not directed to do the items and they are not on his list. So that really did not get the BLM where they were hoping.
- **Nick D.** – did you agree to the list I gave you? I am pretty sure that is what is on Bard's list as well.
- **Sam** – Barry what are some of the things we discussed with Brad that he says was not on his list.
- **Barry** – the TSA leaks on the twenty inch flange, we also need to change the gaskets on the TSA. The LDAR contractor pointed out that both are leaking. We tried tightening the bolts, but, it was not effective.
- **Nick D.** – we talked about that on Thursday and that should have been resolved with Brad when he was at the Plant on Friday.
- **Sam** – Brad said we were not addressing the TSA issue at this time.

- **Mark M.** – we discussed internal rodding clean out of the inner coolers and after coolers. We also spoke about an internal flushing clean out of the charcoal fouling in the DGA system.
- **Nick** – We talked about the rodding out of the cooler the other day. Do you have some type of indication that they are fouled?
- **Mark** – we are having real cooling problems, all the evidence shows that there should be better efficiency.
- **Nick** – when you say all the evidence, there has to be three pieces of evidence; 1) Air temperature, 2) process gas in, 3) process gas out. These are the three pieces of information to determine if they are fouled.
- **Barry** – Nick, what we have had to do in the summer months is put fans and water coolers in place in order to keep the after coolers cooled off.
- **Nick** – that’s not because they are fouled internally. That’s because the air cooler is only efficient to the outside temperature and humidity allows.
- **Mark C.** - Barry, typically when we do the chemical cleaning of the pins doesn’t that help quite a bit?
- **Barry** – Yes it does, however, it is a short term fix to the issue. However, the temperatures are reaching the critical state, which leaves me to believe that something is fouling inside. Ten years ago we did not need to have water coolers under there, and we are having to get creative with the water, so it is an issue.
- **Mark C.** – so the cleaning of the pins that we do is not lasting as long?
- **Barry** – it helps a lot, but, like I said before in the heat of the summer we have to get really creative in order to keep it running.
- **Mark C.** – have you pretty much always had to do that? I know it goes back quite a ways from what I remember. Is it a thing where the coolers are under sized, I mean I do not know?
- **Randy** – We have had to do it for a while. Since we have been lowering the suction more and more it has been getting close to critical. We are just looking ahead with potential high summer temperatures.
- **Nick** – it changes the conditions, and your compression ratio. Gases add additional heat energy, so that is the difference. It does not mean that internally the coolers are fouled it means the characteristics of what you are processing. During the outage open up the end plate of one of the bundles and get it inspected.
- **Mark C.** – I think the way these are set up Nick, and, you can correct me if I am wrong, there is a pipe plug for each tube? **Randy/Barry** – Yes.
- **Nick D.** – I will follow up with Brad concerning the twenty inch flange.
- **Sam** – Just to be clear we spoke with Brad about it and Mark, did not Brad state it was not in his scope?
- **Mark M.** – Brad’s actual words were he has not been told that he needs to fix that yet.

- **Barry** – the only other thing that we were going to do are blow downs that need fixing, however a couple are on Bush B1 and will not be able to fix them during the shutdown. Bush B1 needs to run for fuel gas.
- **Sam** – I believe Brad heard you about the DGA pump. I believe he has people out there looking at it, is that correct? **Randy** – Yes.
- **Sam** - Nick that covers the issues that BLM had regarding the outage. I am glad we had the opportunity to speak with Brad and sort out our concerns.
- **Sam**- if we can get the scope adjusted appropriately and let Brad know what needs to be done, I believe we have the BLM side covered.
 - On the hook up of the central compressor, I know some changes will need to be done, and welding will need to be done. We are good and it all falls under the 4 day scope, correct? **Nick D.** – Yes
 - I think we have an understanding that the BLM will be doing some of the SWIMs manual. Mark and Brad discussed what is required.
 - Are we still good with the scheduled March shutdown? **Nick D.** – Yes, with the proposed date of March 18 and back I production on March 25.
- **Rick** – on the helium well tuning, I know that when they did the K100 compressor they expected to get a little increase in the value output. However, there is a second level to this with tuning the wells in order to get more product out.
- **Sam**- Brad was trying to get his personnel in there to do that, but, I do not know how much more has been done in regards to the well tuning. Nick, do you have any information regarding Rick’s question?
- **Nick D.** – we are going to look at it on Friday.
- **Sam** – Mark M. – was that discussed on Friday?
- **Mark M.** – No, not really.
- **Nick D.** – we will have to get feedback from Brad on the well tuning.
- **Rick** – is there a function of how much more we may get by tuning the wells?
- **Sam** – The BLM is working with Brad concerning the well tuning. It needs to be on the list for the March turn around.
- **Rick** – it’s on the list.
- **Sam** – I am not aware for it being on the list for this time.
- **Nick** – it’s on the list that we had in the second line item. We will need to follow up with Brad on the matter.
- **Sam**- so you’re going to have Brad do the well tuning during the outage?
- **Nick** – it’s in there scope they have already agreed to do it.
- **Rick** – does anyone know what the well tuning will bring as far as increases in production?
- **Alex C.** – Rick we never had a number for that, we don’t think it will be significant.
- **Sam** – anything else on the list?

- **Nick D.** - You mentioned that you felt you could get your list of items to boost the C100 done. If you identify specific things that you're going to need external support. The sooner you can identify what they are, the more we can plan for it and squeeze it into the next six weeks.
- **Sam** – the more we speak with people the more we realize that we must meet OSHA requirements and regulations.
- **Nick D.** – We need to accomplish as much as we can with the give given time frame ahead of us.
- **Sam** – Everyone understands the timeline and how the BLM needs to proceed.
- **Nick H.** – how confident are your guys that at the end of the outage the C100 will be operational?
- **Sam** – that's not what this meeting/discussion is about Nick H. This discussion is about all the things the BLM will have to do because it was not completed in the agreement process. It will go out for government contract. The answer to your question is, that it will take several months for the BLM to get the central compressor tied in.
- **Nick D.** - **there** are two issues here; 1) mechanical completion – done by the end of the outage, and 2) administrative operating manual.
- **Melissa H.** – Sam is absolutely correct. Whatever is not completed on the compressor before April 1, 2018, the BLM would have to go out and solicit in order to procure that work separately. The reason being is it would not be considered within the scope of the FAR based contract.
- **Nick D.** – my feeling is that the C100 can be put together and ready on March 31, 2018.
- **Nick H.** – Sam are you aware at this point of any additional services that will be required after the outage?
- **Sam** – we went through the list and thought we had our operating manuals that were going to be PSM compliant. The question is are we OSHA compliant and is Air Products okay with the BLM turning the machine on?
- **Sam** – the real issue Nick is that I thought that once there was a commissioning Air Products would turn it over and the BLM would be able to run the compressor. However, I have not heard that there would be a turnover of this instrumentation so that the BLM could use it.
- Discussion continued as to whether or not the BLM will be able to operate the C100 compressor. Topic needs to be discussed with Brad Beckley.

Meeting Adjourned