Message

From: Russo, Todd [Russo.Todd@epa.gov]
Sent: 9/23/2021 12:14:15 PM
To: Kemker, Carol [Kemker.Carol@epa.gov]
Subject: RE: NEW-INDY CATAWBA LLC STEAM STRIPPER STATUS

It's the Oxidation Reduction Potential. There's a definition below from the internet, but as I understand it, New Indy is using ORP to measure the biological oxygen demand which is supposed to provide them with an early warning system if levels get out of balance and have potential to create undesirable levels of H2S. They have installed two ORP probes in the foul condensate hard pipe to the ASB. If the ORP indicates levels are getting out of balance, they can take steps to bring levels back into balance like injecting more peroxide and curtailing production.

ORP (oxidation reduction potential) is typically measured to determine the oxidizing or reducing potential of a water sample. It indicates possible contamination, especially by industrial wastewater. ORP can be valuable if the user knows that one component of the sample is primarily responsible for the observed value. For example, excess chlorine in wastewater effluent will result in a large positive value and the presence of hydrogen sulfide will result in a large negative value.

ORP is determined by measuring the potential of a chemically-inert (platinum) electrode which is immersed in the solution. The sensing electrode potential is read relative to the reference electrode of the pH probe and the value is presented in millivolts (mV).

Regards,

Todd Russo
Chief, Air Enforcement Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 4
Tel: (404) 562-9194

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From: Kemker, Carol <Kemker.Carol@epa.gov>
Sent: Thursday, September 23, 2021 7:56 AM
To: Russo, Todd <Russo.Todd@epa.gov>
Subject: RE: NEW-INDY CATAWBA LLC STEAM STRIPPER STATUS

What is an ORP?

From: Russo, Todd <Russo.Todd@epa.gov>
Sent: Thursday, September 23, 2021 6:45 AM
To: Kemker, Carol <Kemker.Carol@epa.gov>; Lamberth, Larry <Lamberth.Larry@epa.gov>; Newman, Keriema <Newman.Keriema@epa.gov>; Kler, Denis <Kler.Denis@epa.gov>; Taylor, Kevin <Taylor.Kevin@epa.gov>; Mills, Andrew

<mills.andrew@epa.gov>; Dressler, Jason <Dressler.Jason@epa.gov>; Pratt, Marirose <Pratt.Marirose@epa.gov>; Fried, Gregory <Fried.Gregory@epa.gov>; Caballero, Kathryn <Caballero.Kathryn@epa.gov>; Foley, Patrick <Foley.Patrick@epa.gov>; Secrest, Cary <Secrest.Cary@epa.gov>
Subject: FW: NEW-INDY CATAWBA LLC STEAM STRIPPER STATUS

Stripper update from New Indy. I think Pete Cleveland meant Thursday, 9/23/21, since he sent the email on Wednesday, 9/22/21 at 5:53 pm.

Scott:

Quick update.

The ORP system issues appear to be resolved and is currently functioning very well, and we continue to monitor the system for proper response and reactivity. If the system continues to function as expected, we are on schedule to begin the maintenance portion of the outage tomorrow evening (Thursday, Sept. 22). Should any issues develop to prevent the ORP system from functioning as it should during this evaluation period, we will delay the stripper outage until the issue(s) can be resolved.

Regards,

PETE CLEVELAND
Technical Manager

Regards,

Todd Russo
Chief, Air Enforcement Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 4
Tel: (404) 562-9194

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From: Pete Cleveland <pete.cleveland@new-indycb.com>
Sent: Wednesday, September 22, 2021 5:53 PM
To: reynolds@dhec.sc.gov
Cc: Rippy, Crystal <RIPPYCD@dhec.sc.gov>; Miller, Matthew W. <millermw@dhec.sc.gov>; Dan Mallett <dan.mallett@new-indycb.com>; Tony Hobson <tony.hobson@new-indycb.com>; Jim Cobery <JimC@TheKraftGroup.com>; Randy Lowell <rlowell@willoughbyhoefer.com>; Russo, Todd <Russo.Todd@epa.gov>
Subject: RE: NEW-INDY CATAWBA LLC STEAM STRIPPER STATUS

Scott:

Quick update.

The ORP system issues appear to be resolved and is currently functioning very well, and we continue to monitor the system for proper response and reactivity. If the system continues to function as expected, we are on schedule to begin the maintenance portion of the outage tomorrow evening (Thursday, Sept. 22). Should any issues develop to prevent

the ORP system from functioning as it should during this evaluation period, we will delay the stripper outage until the issue(s) can be resolved.

Regards,

PETE CLEVELAND
Technical Manager
Office: (803) 981-8206

From: Pete Cleveland
Sent: Wednesday, September 22, 2021 11:23 AM
To: Reynolds, Scott <REYNOLDS@dhec.sc.gov>
Cc: Rippy, Crystal <RIPPYCD@dhec.sc.gov>; Miller, Matthew W. <millermw@dhec.sc.gov>; Dan Mallett <Dan.Mallett@new-indycb.com>; Tony Hobson <tony.hobson@new-indycb.com>; Jim Cobery <JimC@TheKraftGroup.com>; Randy Lowell <rlowell@willoughbyhoefer.com>
Subject: RE: NEW-INDY CATAWBA LLC STEAM STRIPPER STATUS

Scott:

We will certainly make the distribution list additions. Lots of activity onsite right now with finalizing the implementation of our ORP monitoring plan (will certainly be well-tested and vetted prior to beginning the stripper outage activities). Will keep you posted.

PETE CLEVELAND
Technical Manager
Office: (803) 981-8206

From: Reynolds, Scott <REYNOLDS@dhec.sc.gov>
Sent: Wednesday, September 22, 2021 10:33 AM
To: Dan Mallett <Dan.Mallett@new-indycb.com>
Cc: Pete Cleveland <pete.cleveland@new-indycb.com>; Rippy, Crystal <RIPPYCD@dhec.sc.gov>; Miller, Matthew W. <millermw@dhec.sc.gov>
Subject: Re: NEW-INDY CATAWBA LLC STEAM STRIPPER STATUS

External E-Mail - Caution - This email originated outside of New-Indy.

Thanks for the update.
When reports recommence, please add Crystal Rippy and Matt Miller (copied) to the list of recipients.

Is it safe to expect some leadup/testing of the system prior to Stripper shut down reflected in the reports like there was on Saturday?

Again, if the ORP output (and supporting parameters) can be provided in a table, that would be preferable.

So we can better understand and interpret the ORP signal, we would like to see some supporting information:
Any planned /actual changes to flow, composition, or source of flow through the hard pipe,

Related process control data (from hard pipe, or ASB inlet and outlet) - in particular flow , pH, Dissolved Oxygen and Sulfides.

If there are other parameters that you find useful to monitor the performance of the system and load to the ASB, If you can provide, that could help avoid some questions as we go forward.

Please don't hesitate to call us if you have any questions.

Scott Reynolds

Senior Scientist
S.C. Dept. of Health & Environmental Control
Office: (803) 898-3305

www.scdhec.gov

From: Dan Mallett <Dan.Mallett@new-indycb.com>
Sent: Tuesday, September 21, 2021 4:19 PM
To: Reynolds, Scott <REYNOLDS@dhec.sc.gov>; Shealy, Renee <shealyrg@dhec.sc.gov>
Subject: NEW-INDY CATAWBA LLC STEAM STRIPPER STATUS

*** Caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***

Good afternoon,
I am providing an update to the steam stripper maintenance program as discussed during our Monday conference call. As of this time, the stripper remains online. We continue to source instrumentation to provide redundancy in the ORP measurement program to ensure continuous monitoring throughout the stripper outage. This equipment is projected to arrive in the morning. Once installed, we anticipate initiating shutting down the unit later in the day. I will provide an update Wednesday on the status of this project.

Please contact me with any questions.

DANIEL MALLETT
Environmental Manager
Office: (803) 981-8010
Mobile: (207) 951-6216

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