In the Matter Of:

Department of Natural Resources & Environmental Control

CRODA INC. FEDERALLY ENFORCEABLE June 29, 2021



Croda Inc. Federally Enforceable - June 29, 2021

		2
1	TABLE OF CONTENTS	
2	Page	
3	Introduction by Ms. Vest	
4	Presentation by Joanna French	
5	Entry of Exhibits 1 through 11 20	
6	Presentation by Croda, Chris Barnett 21	
7	Conclusory Remarks by Ms. Vest 27	
8	Certificate of Reporter	
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

		3
1	MS. VEST: Good evening. The time	
2	is 6:00 p.m. I believe that everybody has	
3	been connected, and we are all here, so	
4	welcome.	
5	Thank you for taking the time out	
6	of your busy schedules on this extremely hot	
7	day.	
8	The date is Tuesday, June 29, 2021,	
9	and we are here this evening to provide the	
10	virtual platform for the State of Delaware's	
11	Department of Natural Resources and	
12	Environmental Control's virtual public	
13	hearing regarding Croda.	
14	They currently have pending before	
15	the Department a federally enforceable Air	
16	Quality 1102 permit application.	
17	For those of you that do not	
18	recognize me, my name is Lisa Vest. And	
19	Secretary Garvin has designated me to serve	
20	as the hearing officer for tonight's legal	
21	proceedings.	
22	Just a few introductory remarks,	
23	and then we will turn it over to the	
24	Department for the beginning of the	

presentation portion of tonight's matter.

Changes were made to DNREC's public hearing protocols back in 2020, originally necessitated by Delaware's ongoing State of Emergency, due, of course, to the COVID-19 pandemic.

First and foremost, this hearing is being conducted virtually. No one is gathered in the same room. Everybody is participating independently in their own respective locations.

While there are no sign-in sheets to serve as a way of attendance at tonight's hearing, the system, WebEx, does generate a list for these matters, and the Department will still keep record of those who have virtually attended tonight. So, again, I do thank you for taking the time to join us this evening.

At the conclusion of these remarks,

I will turn the hearing over to

representatives for both the Department and
the Applicant, which again in this case is

Croda. Their presentations will be offered

5 1 for the record being generated in this 2 matter. As I did mention, there is a court 3 reporter that is also virtually present. 4 will, of course, prepare a verbatim 5 transcript of the hearing tonight, pursuant 6 to DNREC's statutory obligations to do so. 7 8 And, as always, that transcript will be posted on the Department's hearing 9 10 webpage that's dedicated to this matter as 11 soon as we get it from the court reporting 12 company. 13 Following the conclusion of both 14 the Department's presentation and the Applicant's presentation, we then turn to the 15 live comment portion of tonight's hearing. 16 17 We do have a pre-registration 18 protocol which allows members of the public 19 to preregister in advance. And then we have a little bit of time to make sure that, you 20 know, they can connect and everything is 21 22 good.

And we do have one gentleman

tonight that will be offering live comment,

23

24

and that will happen at the conclusion of both presentations.

As is the case with all DNREC public hearings, the Department wishes to ensure that everyone is offered the ability to have comment included into the hearing record that gets generated in these matters.

Therefore, the record will not be closing at the conclusion of tonight's proceedings. Rather, it will remain open to receive comment through July 14th. Members of the public may feel free to offer comment after hearing the presentations tonight, if they wish to do so.

For those of you that are attending this meeting, I would encourage you to check out DNREC's webpage for public hearings that's found under the Administrative Law Section.

All presentations, along with the exhibits that you will see being entered into the record tonight, and any other documentation and comments that may come in between now and the time that the record

7 1 closes on July 14th, everything will be 2 posted as it gets received, and the public may gain a wealth of information by reviewing 3 all of that documentation. 4 Of course, all mechanisms 5 previously available by which to offer 6 comment remain in effect: Electronic link, 7 8 e-mail, and, of course, United States Postal 9 Service. 10 And, also, the following protocols do remain in place, as they are for all 11 12 public hearings: 13 Number one: All comment received 14 must be limited solely to the subject matter of tonight's hearing. All such comments 15 pertinent to the subject matter will be 16 17 incorporated into the record being generated in this matter. 18 Number two: In order to ensure 19 20 that everyone who wishes to offer comment for the Secretary's consideration is 21 22 accommodated, the record will remain open 23 following tonight through July 14th, 2021. 24 Number three: There is only one

authentic record of this formal proceeding tonight, and it is the official court reporter's verbatim transcript, which again will be posted on the hearing webpage as soon as it is received.

Number four: The statutory purpose of tonight's hearing is, of course, to help build the record with regard to this pending permitting matter and the Department's actions regarding that.

A record consisting of the transcript of the hearing tonight, all written comments that are received, all exhibits, and eventually my Hearing Officer's Report, will all be reviewed by Secretary Garvin.

The Secretary is the one who will ultimately issue an order following his review process, and that order will contain his decisions on this matter and his reasoning therefor.

Lastly, it's important to note that no decisions have already been made by the Department, nor will any decisions be made

tonight with regard to this pending action.

Again, the public comment period will remain open through July 14th, 2021 so that everyone has ample opportunity to submit written comment for the Secretary's consideration, should they wish to do so.

Comment may be submitted through a comment form link on the hearing page, via e-mail to DNRECHearingComments@delaware.gov, or, of course, via the United States Postal Service at the physical address indicated on the hearing page and/or the public notices that have all been previously issued in this matter.

It should be noted that written comment to DNREC may not be submitted via any social media platforms such as Twitter, Facebook, YouTube, or standard text messaging.

Lastly, please remember that all comment, whether it's received through the United States Postal Service physically or through any of the electronic mechanisms that I have just mentioned now, they all bear the

same weight, and they will all be considered equally by the Secretary prior to his making a final decision, provided that they are received before July 14, 2021.

Once again, the ultimate decision regarding this matter is made by DNREC's Secretary Garvin. This formal hearing acts as a mechanism to enable the Department to thoroughly vet this proposed permitting action to the public and to let the public know the various ways by which comment may be submitted for the Secretary's consideration.

That being said, I am now going to turn the floor, as it were, over to Joanna French. She has a brief presentation on behalf of the Department. And Joanna, you may proceed when ready.

MS. FRENCH: Thank you. My name is Joanna French, and I am the acting program administrator for the Engineering and Compliance Branch in the Division of Air Quality.

Thank you for joining us today for the public hearing on the air permit

application for Croda. The application was required to be submitted by the settlement agreement dated February 26, 2021 to update the emission units related to the ethylene oxide production facility.

I will briefly go through the application timeline. The original application was received on January 4, 2021. Following a review of the application by the Division, a revised cover letter was submitted on April 16, 2021.

We placed a legal notice in the Delaware State News and the News Journal, as well as online on our DNREC Internet site on May 30, 2021. And tonight, June 29th, is our public hearing.

We will be accepting verbal comments from those who have preregistered. Additionally, written comments may be submitted on this application, the draft permit, as well as the technical memorandum through July 14, 2021.

Croda will provide specific information on the application in their

presentation. But I wanted to give just a brief summary of the application.

The application addresses three items.

The first item is a request to re-route emissions from the Drying Column Hotwell to the control device, which is the Ethanol Dehydration Furnace. This change will eliminate direct emissions from the Hotwell.

The second item will require a higher control of efficiency from the vent scrubber. The control requirement will be changed from 95 percent to 99 percent. And in addition to this change, operating parameters for the operation of the scrubber will be added to the permit as determined by stack testing that was performed on that unit.

And the last item, item number three, will address permitted emissions from the ethanol dehydration furnace. This change will revise emissions of carbon monoxide, nitrogen oxides, sulfur dioxide, volatile

		ıs
1	organic compounds, and particulate matter.	
2	The current permit did not include the	
3	maximum emissions from this process, and this	
4	error will be corrected for this permit.	
5	I will give you a little bit of	
6	background on Croda. The facility is	
7	considered a Major Source and is subject to	
8	our Title V Operating Permit Program.	
9	Croda emits greater than the EPA	
LO	Major Source Threshold for nitrogen oxides.	
11	The facility is a Synthetic Minor Source for	
12	both volatile organic compounds and hazardous	
13	air pollutants.	
L4	This means that the facility has	
15	taken federally enforceable operational	
L6	limitations in their permit to keep emissions	
L7	below these Major Source Thresholds.	
L8	This is just a table of the EPA	
L9	Major Source Thresholds. EPA is the one who	
20	sets the emission limits for the Major Source	
21	Thresholds.	
22	Croda is located in New Castle	
23	County and is a major source of nitrogen	
24	oxides, since emissions may exceed 25 tons	

14 1 per year. 2 As I mentioned, Croda has taken permit limits to restrict emissions of 3 volatile organic compounds and hazardous air 4 pollutants below 25 tons per year. 5 Additionally, emissions of a single 6 7 hazardous air pollutant may not exceed ten 8 tons per year. 9 So what does that mean for our permitting process? Major Sources are 10 required to have a Title V Operating Permit. 11 12 This permit is enforceable by both the State of Delaware as well as the Environmental 13 14 Protection Agency. The legal notice for this type of 15 permit is 30 days rather than the 15 day for 16 a state enforceable permit. 17 Additionally, the Region 3 EPA 18 office has a 45-day review period to look at 19 both the draft permit and the technical 20 21 memorandum which explains the basis behind 22 the permit. 23 In addition, effective states, 24 which are states within 50 miles of the

source, are also provided notice of our intent to issue a permit to the facility.

In this case we notified Maryland, Pennsylvania, and New Jersey of notice to issue this draft permit.

So I wanted to go through our permitting process so you know exactly what we do when we look at a permit application.

Once we receive the application, the first thing that happens is our administrative staff reviews the application to make sure that it's administratively complete, which means that all the parts are there, all the boxes are checked.

The application is then sent to an assigned engineer. He reviews the application to make sure that the application is technically complete, that we have all the information we need to make a determination for the permit.

The engineer will check to see where the facility is located. If the facility is located within the Coastal Zone, we will work with the Division of Climate and

Energy to determine if a Coastal Zone permit is required.

Croda is located within the Coastal Zone. Coastal Zone approval was provided with initial application for the ethylene oxide plant.

The higher emission limits that are being requested for the Ethanol Dehydration Furnace were actually included in the application and permit for the Coastal Zone application.

The engineer will also verify the zoning of the property to make sure that the proposed equipment will be placed on the site.

Next, the engineer will review the technical information and verify that the emission calculations on the application are correct.

The engineer will also use a computer model to determine pollutant concentrations outside of the facility's property lines to verify that these emissions will not be detrimental to public health and

17 1 the environment. 2 The engineer will review the application and determine which State and 3 Federal requirements are applicable to the 4 project. They will draft a technical 5 memorandum. 6 And this technical memorandum will 7 8 discuss all applicable Federal and State regulations, as well as associated 9 10 requirements. 11 This document includes all the 12 reasoning behind the draft permit, including 13 emission and operational limits, testing, 14 monitoring, recordkeeping, and reporting. Based on the technical memorandum, 15 16 the engineer will draft the permit. 17 The draft permit and the technical memorandum are reviewed internally by the 18 19 engineer program manager and the program administrator. 20 21 Once approved internally, the draft 22 permit will be public noticed, submitted to 23 the EPA Region 3 Office for review, and

notifications will be sent to surrounding

24

18 1 states. 2 The application draft permit and technical memorandum were advertised in this 3 case with a scheduled public hearing. So 4 tonight we will be accepting verbal comments 5 from those who have registered or 6 7 preregistered. 8 And, additionally, we will accept written comments on the submitted 9 application, the draft permits, and the 10 technical memorandum through July 14, 2021. 11 12 After the close of the public 13 hearing, the Division of Air Quality, 14 as well as the applicant, Croda, will respond to all of the comments received. 15 The Division of Air Quality will 16 17 draft a technical response memorandum including all responses to the contents, and 18 we will submit this memorandum to the hearing 19 officer so that she can review and make a 20 21 recommendation to the Secretary of the 22 Department. 23 Okay. And with that, that is the 24 end of my presentation. I would like to read

		19
1	our exhibits into the record.	
2	MS. VEST: Okay.	
3	MS. FRENCH: Okay. The first	
4	Exhibit Number 1 is the permit modification	
5	application.	
6	Exhibit Number 2 is the revised	
7	permit modification application cover letter.	
8	Exhibit Number 3 is the legal	
9	notice for the Delaware State News.	
LO	Exhibit Number 4 is the legal	
11	notice for the News Journal.	
12	Exhibit Number 5 is our technical	
13	memorandum.	
L4	Exhibit Number 6 is our	
15	draft/proposed construction permit.	
L6	Exhibit Number 7 is the State	
L7	Public Meeting Calendar notice.	
18	Exhibit Number 9 is the DNREC	
L9	public hearing webpage.	
20	And finally, our last exhibit,	
21	Exhibit Number 10, is this hearing, public	
22	hearing presentation that I am giving now.	
23	MS. VEST: Okay. Just some basic	
24	keeping for the record, for the benefit of	

20 1 the record: Are the Exhibits 1 through 11, as shown on the screen right now, the same 2 documents that have been posted on the 3 hearing webpage dedicated to this matter? 4 5 MS. FRENCH: Yes, they are. MS. VEST: And have they been 6 7 changed or altered in any way? 8 MS. FRENCH: No, they have not. 9 MS. VEST: Okay. Excellent. Let the record reflect that DNREC proposed 10 Exhibits 1 through 11, as identified by 11 12 Ms. French now and as posted on the hearing 13 webpage, are hereby formally entered into the hearing record. 14 Does the Department have anything 15 that they wish to add additionally other than 16 17 what you have just said at this time? 18 MS. FRENCH: No, we do not. 19 MS. VEST: Okay. Very good. 20 thank you Joanna, for that. 21 Going on right now to the 22 Applicant's portion of tonight's proceeding, 23 I believe that Mr. Barnett is representing 24 Croda, and he has a brief presentation that

21 1 he would like to provide to the attendees 2 here, as well. So we will take down that screen 3 and get Croda's up. And Mr. Barnett, you may 4 5 proceed when ready. 6 MR. BARNETT: All right. Thank 7 you, Lisa. Can you hear me okay? 8 MS. VEST: I can hear you fine. 9 MR. BARNETT: Again, my name is Chris Barnett. I'm the site director of the 10 11 Croda Atlas Point facility. 12 Before I get started on our 13 permitting information about the permitting 14 request, I wanted to mention today that we did have a drill at the site. 15 So if you were living within 16 17 hearing distance of our site alarm, you may 18 have heard it at an unusual time today. 19 Normally, it goes off at lunchtime, 12 20 exactly every day as a test. Today it went off at 11. 21 22 Hopefully, our message got out to 23 the community. We did have some signs and 24 other notifications we did, and we had a

successful test.

Again, it was just a drill of our site population. It was not an alarm that we would normally hear, again, at the site. It normally happens at noon. Today it happened at 11 and then again at 12, so hopefully everyone was pre-informed and did not worry.

So getting started with the permit discussion, I have essentially four main topics. These will match with what Joanna talked about earlier, and some of this will sound a little redundant, so I apologize.

We will talk about the vent scrubber, the tank we call a Hotwell, our furnace permit limits for the emissions that will be directed from the Hotwell to this new furnace, and, lastly, a steam boiler and some changes we are making there around NOx.

Next slide, please: So the scrubber that we are talking about, we call it Scrubber T-330. This scrubber removes ethylene oxide from off-gases from the EO storage tanks that we have at the ethylene oxide production plant.

1 The emissions from this scrubber 2 go, currently go to the atmosphere. This scrubber will control emissions to greater 3 than 99 percent. 4 5 However, we want to take these emissions and reroute them so that they go 6 7 back into the process to be recaptured. 8 So this would essentially take the piping that goes to the atmosphere. It 9 10 returns it back to the process where we can capture the ethylene oxide in the process, 11 12 itself. 13 It's a change that should reduce emissions, again, from the scrubber. 14 Next slide, please: The Hotwell is 15 just essentially a tank. It's designated as 16 17 F-610 here at our site. It's a tank where we collect steam and streams of hot water. 18

And it's used to collect these from an area where we have a glycol by-product that's made in the plant. These gases, again, are currently vented to the atmosphere.

And you should note that this

Lexitas

www.LexitasLegal.com/Premier

19

20

21

22

23

24

Hotwell has not been operated since last
September. We shut down this area of the
plant when we had done some stack testing and
found that the Hotwell was not working as we
thought it was from its design.

We are going to reroute these vent streams from the atmosphere to go to our Ethanol Dehydration Furnace instead. This furnace will burn these emissions and essentially convert any volatile organic compounds into carbon monoxide and water.

Next slide, please: This Ethanol
Dehydration Furnace is designated as B-1210
at our site. The Hotwell, again, will be
connected to the furnace, but it won't have a
significant impact on the emissions profile
from the furnace, because the Hotwell
emissions are very, very small. But the
furnace will treat this small amount of
emissions and, again, make it into, you know,
carbon monoxide and water.

After we make this change, we will be required to do a stack test of this unit in the future.

The permit updates that Joanna had talked about, again, are going to correct some emission limits that were approved back when we originally did our Coastal Zone permitting, the emission limits we changed in the Title V permit.

Again, these were discussed as part of the Coastal Zone permitting actions that were made before.

So it's just, again, a correction of some numbers that were translated mistakenly.

The one thing we are agreeing to as part of this process, we recognize that this does increase some NOx emissions from our furnace, so we will be reducing NOx emissions in other parts of our facility by a ratio of 1.3 to 1. And I will talk about that a little bit in this last slide.

We are going to do that -- you can go ahead, Joanna. Thank you. Yes. The last slide I have here, I'm going to talk a little bit about the boilers that we use at the site. We use boilers at the site to make

steam, and the steam is used to heat things around our facility, from our process to our buildings.

The one boiler we have, we call boiler three, is a vintage technology from 1947. It's been upgraded over the years, but it's never been completely replaced with much newer technology.

We will be replacing that boiler.

It's not currently in operation. And we are going to replace it with a new technology boiler that has significantly lower NOx emissions. It has much more effective burner technology and other things that will make it a lot better at NOx emissions.

So we will use this to essentially offset, more than offset the increase in NOx emissions from our dehydration furnace.

And this is something that we are currently working on this project right now, and it will have to go through the permitting process.

So that's all the information I have about the permitting changes. So I will

27 1 hand it back to you, Lisa. 2 MS. VEST: Okay. Thank you very much, Mr. Barnett. And, again, a little 3 housekeeping regarding your presentation. 4 Croda has provided an electronic 5 copy of that Power Point presentation, and I 6 have gone ahead and entered that into the 7 8 record, as well, for anyone that's attending virtually this evening. 9 10 You can, again, visit the DNREC hearing webpage, and you will see that under 11 12 Applicant's Exhibit Number 1. And, again, 13 thank you Mr. Barnett for that information. 14 At this point we would be going to those that have offered to speak and 15 preregistered. We had one gentleman, Martin 16 17 Willis, has preregistered to speak, but I'm not sure if he is actually attending tonight. 18 19 Megan, do you see him in the list yet? 20 MS. SWEENEY: This is Megan. No, I do not see him in the list. 21 22 MS. VEST: Okay. Well, we will 23 give -- I will say some final remarks here. 24 We will give him a couple more minutes.

Who knows with this heat, anything could have happened. I hope he is okay. But he did register to speak. I'm sure that if, for whatever reason, he did not make it tonight, I'm sure that he will be able to submit them over the next 15 days for inclusion into the record.

So, with that being said, I want to thank both the Department and the Applicant for offering their presentations for those in attendance tonight.

Again, comments can be received anytime between now and through July 14, 2021, whether they come physically through the United States Postal Service or any kind of other physical correspondence, Fed-Ex, whatnot, they can get mailed to the address that you see on the screen, they can also be submitted electronically through the comment link that you will find on the DNREC hearing webpage.

It doesn't matter how we get them, as long as they are received by the Department on or before July 14, 2021, they

all bear the same weight. It doesn't matter whether they are spoken verbally tonight or whether they are received prehearing, during hearing, or post-hearing.

As long as the record is open to receive them, and they are related to the specific subject matter of this particular permitting action, they will be incorporated into the record, and the Secretary will review them all prior to his making a decision.

One last time, Megan, do you see Mr. Willis?

MS. SWEENEY: No, do I not see him.

MS. VEST: Okay. Well, Mr. Willis, I hope everything is okay. We tried to give you the opportunity. So, by all means, if you are listening to this on your way or something, I'm sorry you couldn't make it. Please feel free to submit your comments over

I want to thank everybody for attending tonight. This meeting is hereby adjourned. (6:24 p.m.)

the next 15 days, like I said.

CERTIFICATE

I, Lorena J. Hartnett, a Notary Public and Registered Professional Reporter, do hereby certify that the foregoing is an accurate and complete transcription of the proceeding held at the time and place stated herein, and that the said proceeding was recorded by me and then reduced to typewriting under my direction, and constitutes a true record of the testimony given by said witnesses.

I further certify that I am not a relative, employee, or attorney of any of the parties or a relative or employee of either counsel, and that I am in no way interested directly or indirectly in this action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office on this 30th day of June 2021.

Lorena J. Hartnett Registered Professional Reporter

		ahead 25:21
1	6	air 3:15 10:21,24 13:13 14:4,7 18:13
1 19:4 20:1,11 25:18	6 19:14	alarm 21:17 22:3
1.3 25:18	6:00 3:2	altered 20:7
10 19:21	7	amount 24:19
11 20:1,11 21:21 22:6		ample 9:4
1102 3:16	7 19:16	and/or 9:12
12 21:19 22:6		apologize 22:12
14 10:4 11:22 18:11	9	applicable 17:4,8
14th 6:11 7:1,23 9:3	9 19:18	
15 14:16	95 12:14	applicant 4:23 18:14
16 11:11	99 12:14 23:4	Applicant's 5:15 20:22
1947 26:6	A	application 3:16 11:1,7,8,9,20,24 12:2,3 15:8,9,11,15,17 16:5,10,11,18 17:3 18:2,10 19:5,7
2		approval 16:4
2.400	ability 6:5	approved 17:21 25:3
2 19:6	accept 18:8	April 11:11
2020 4:3	accepting 11:17 18:5	area 23:20 24:2
2021 3:8 7:23 9:3 10:4 11:3,8,11,15, 22 18:11	accommodated 7:22	assigned 15:16
25 13:24 14:5	acting 10:19	Atlas 21:11
26 11:3	action 9:1 10:10	atmosphere 23:2,9,23 24:7
29 3:8	actions 8:10 25:8	attendance 4:13
29th 11:15	acts 10:7	attended 4:17
	add 20:16	attendees 21:1
3	added 12:17	attending 6:15
3 14:18 17:23 19:8	addition 12:15 14:23	authentic 8:1
30 11:15 14:16	additionally 11:19 14:6,18 18:8	datientio 6.1
30 11.15 14.16	20:16	В
4	address 9:11 12:21	B-1210 24:13
1	addresses 12:3	
4 11:8 19:10	administrative 6:18 15:11	back 4:3 23:7,10 25:3
45-day 14:19	administratively 15:12	background 13:6
5	administrator 10:20 17:20	Barnett 20:23 21:4,6,9,10
	advance 5:19	Based 17:15
5 19:12	advertised 18:3	basic 19:23
50 14:24	Agency 14:14	basis 14:21
	agreeing 25:13	bear 9:24
	agreement 11:3	beginning 3:24

behalf 10:16 benefit 19:24 bit 5:20 13:5 25:19.23 **boiler** 22:17 26:4.5.9.12 **boilers** 25:23,24 **boxes** 15:14 Branch 10:21 briefly 11:6 build 8:8 buildings 26:3 **burn** 24:9 **burner** 26:13 **busy** 3:6 by-product 23:20 C calculations 16:18 Calendar 19:17 call 22:14.20 26:4 capture 23:11 carbon 12:23 24:11,21 case 4:23 6:3 15:3 18:4 **Castle** 13:22 change 12:8,15,22 23:13 24:22 changed 12:14 20:7 25:5 check 6:16 15:21 checked 15:14 **Chris** 21:10 Climate 15:24 close 18:12 closes 7:1

closing 6:9 Coastal 15:23 16:1,3,4,10 25:4,8 collect 23:18,19 **Column** 12:6 **comment** 5:16,24 6:6,11,12 7:7,13, 20 9:2,5,7,8,16,21 10:11 www.LexitasLegal.com/Premier

comments 6:23 7:15 8:13 11:18,19 18:5,9,15

community 21:23 company 5:12 complete 15:13,18 completely 26:7 Compliance 10:21

compounds 13:1,12 14:4 24:11

concentrations 16:22 conclusion 4:20 5:13 6:1.9

conducted 4:8 connect 5:21

computer 16:21

connected 3:3 24:15

consideration 7:21 9:6 10:12

considered 10:1 13:7 consisting 8:11 construction 19:15

contents 18:18

control 12:7,12,13 23:3

Control's 3:12 convert 24:10 correct 16:19 25:2 corrected 13:4

County 13:23 **court** 5:3,11 8:2 cover 11:10 19:7 **COVID-19** 4:5

correction 25:10

Croda 3:13 4:24 11:1,23 13:6,9,22 14:2 16:3 18:14 20:24 21:11

Croda's 21:4 current 13:2

D

date 3:8 **dated** 11:3 day 3:7 14:16 21:20 days 14:16 decision 10:3,5

decisions 8:20.23.24 dedicated 5:10 20:4

dehydration 12:8,22 16:8 24:8,13

26:18

Delaware 11:13 14:13 19:9

Delaware's 3:10 4:4

Department 3:11,15,24 4:15,22 6:4 8:24 10:8,16 18:22 20:15

Department's 5:9,14 8:9

design 24:5

designated 3:19 23:16 24:13

determination 15:19 determine 16:1.21 17:3

determined 12:17 detrimental 16:24

device 12:7 dioxide 12:24 direct 12:9

directed 22:16 director 21:10 discuss 17:8

discussion 22:9 distance 21:17

discussed 25:7

Division 10:21 11:10 15:24 18:13,16 **DNREC** 6:3 9:16 11:14 19:18 20:10

DNREC's 4:2 5:7 6:17 10:6

DNRECHEARINGCOMMENTS@ DELAWARE.GOV 9:9

document 17:11

documentation 6:23 7:4

documents 20:3

draft 11:20 14:20 15:5 17:5,12,16,17, 21 18:2,10,17

draft/proposed 19:15

drill 21:15 22:2

Drying 12:6 evening 3:1,9 4:19 Garvin 3:19 8:16 10:7 **due** 4:5 eventually 8:14 **qases** 23:21 exceed 13:24 14:7 gathered 4:9 Ε Excellent 20:9 generate 4:14 **exhibit** 19:4,6,8,10,12,14,16,18,20, generated 5:1 6:7 7:17 e-mail 7:8 9:9 gentleman 5:23 earlier 22:11 exhibits 6:21 8:14 19:1 20:1,11 effect 7:7 give 12:1 13:5 explains 14:21 effective 14:23 26:13 **giving** 19:22 extremely 3:6 **glycol** 23:20 efficiency 12:12 good 3:1 5:22 20:19 electronic 7:7 9:23 F greater 13:9 23:3 eliminate 12:9 F-610 23:17 **Emergency** 4:5 Н Facebook 9:18 **emission** 11:4 13:20 16:7,18 17:13 25:3,5 facility 11:5 13:6,11,14 15:2,22,23 happen 6:1 21:11 25:17 26:2 **emissions** 12:6,9,21,23 13:3,16,24 happened 22:5 facility's 16:22 14:3,6 16:23 22:15 23:1,3,6,14 24:9, hazardous 13:12 14:4,7 16,18,20 25:15,16 26:13,15,18 February 11:3 **emits** 13:9 health 16:24 **Federal** 17:4,8 enable 10:8 hear 21:7,8 22:4 federally 3:15 13:15 encourage 6:16 **heard** 21:18 **feel** 6:12 end 18:24 hearing 3:13,20 4:3,7,14,21 5:6,9,16 **final** 10:3 6:6,13 7:15 8:4,7,12,14 9:8,12 10:7, Energy 16:1 **finally** 19:20 24 11:16 18:4,13,19 19:19,21,22 enforceable 3:15 13:15 14:12,17 20:4,12,14 21:17 fine 21:8 engineer 15:16,21 16:12,16,20 17:2, **hearings** 6:4,17 7:12 floor 10:14 16,19 **heat** 26:1 foremost 4:7 Engineering 10:20 **higher** 12:12 16:7 **form** 9:8 ensure 6:5 7:19 hot 3:6 23:18 formal 8:1 10:7 entered 6:21 20:13 Hotwell 12:7,10 22:14,16 23:15 24:1, formally 20:13 environment 17:1 4,14,17 found 6:18 24:4 Environmental 3:12 14:13 ı **free** 6:12 **EO** 22:22 **French** 10:15,18,19 19:3 20:5,8,12, **EPA** 13:9,18,19 14:18 17:23 identified 20:11 equally 10:2 **impact** 24:16 **furnace** 12:8,22 16:9 22:15,17 24:8, equipment 16:14 9,13,15,17,19 25:16 26:18 important 8:22 future 24:24 **error** 13:4 include 13:2 essentially 22:9 23:8,16 24:10 26:16 included 6:6 16:9 G ethanol 12:8,22 16:8 24:8,12 includes 17:11 ethylene 11:4 16:5 22:22,23 23:11 gain 7:3 including 17:12 18:18

Croda Inc. Federally Enforceable - June 29, 2021

incorporated 7:17 lines 16:23 miles 14:24 increase 25:15 26:17 link 7:7 9:8 **Minor** 13:11 Lisa 3:18 21:7 independently 4:10 mistakenly 25:12 information 7:3 11:24 15:19 16:17 list 4:15 model 16:21 21:13 26:23 live 5:16,24 modification 19:4,7 initial 16:5 living 21:16 monitoring 17:14 intent 15:2 located 13:22 15:22,23 16:3 monoxide 12:23 24:11,21 internally 17:18,21 locations 4:11 Ν Internet 11:14 lot 26:15 introductory 3:22 lower 26:12 Natural 3:11 issue 8:18 15:2,5 lunchtime 21:19 necessitated 4:4 **issued** 9:13 newer 26:8 item 12:5,11,20 M News 11:13 19:9,11 items 12:4 made 4:2 8:23,24 10:6 23:21 25:9 nitrogen 12:24 13:10,23 **main** 22:9 noon 22:5 J note 8:22 23:24 **major** 13:7,10,17,19,20,23 14:10 January 11:8 **make** 5:20 15:12,17,19 16:13 18:20 **noted** 9:15 24:20,22 25:24 26:14 Jersey 15:4 **notice** 11:12 14:15 15:1,4 19:9,11,17 **Joanna** 10:14,16,19 20:20 22:10 making 10:2 22:18 noticed 17:22 25:1.21 manager 17:19 notices 9:12 join 4:18 Maryland 15:3 notifications 17:24 21:24 joining 10:23 match 22:10 notified 15:3 Journal 11:13 19:11 matter 4:1 5:2,10 7:14,16,18 8:9,20 **NOX** 22:18 25:15,16 26:12,15,17 **July** 6:11 7:1,23 9:3 10:4 11:22 18:11 9:14 10:6 13:1 20:4 **number** 7:13,19,24 8:6 12:20 19:4,6, matters 4:15 6:7 June 3:8 11:15 8,10,12,14,16,18,21 maximum 13:3 numbers 25:11 Κ means 13:14 15:13 0 mechanism 10:8 keeping 19:24 mechanisms 7:5 9:23 obligations 5:7 L **media** 9:17 off-gases 22:22 meeting 6:16 19:17 lastly 8:22 9:20 22:17 offer 6:12 7:6,20 members 5:18 6:11 **Law** 6:18 offered 4:24 6:5 memorandum 11:21 14:21 17:6,7, legal 3:20 11:12 14:15 19:8,10 offering 5:24 15,18 18:3,11,17,19 19:13 letter 11:10 19:7 office 14:19 17:23 mention 5:3 21:14 limitations 13:16 officer 3:20 18:20 mentioned 9:24 14:2 limited 7:14 Officer's 8:14 message 21:22 limits 13:20 14:3 16:7 17:13 22:15 official 8:2 messaging 9:19

25:3,5

offset 26:17 physical 9:11 protocols 4:3 7:10 ongoing 4:4 physically 9:22 provide 3:9 11:23 21:1 online 11:14 piping 23:9 provided 10:3 15:1 16:4 open 6:10 7:22 9:3 place 7:11 **public** 3:12 4:2 5:18 6:4,12,17 7:2,12 9:2,12 10:10,24 11:16 16:24 17:22 operated 24:1 plant 16:6 22:24 23:21 24:3 18:4,12 19:17,19,21 operating 12:15 13:8 14:11 platform 3:10 purpose 8:6 operation 12:16 26:10 platforms 9:17 pursuant 5:6 operational 13:15 17:13 **Point** 21:11 Q opportunity 9:4 pollutant 14:7 16:21 order 7:19 8:18,19 **pollutants** 13:13 14:5 Quality 3:16 10:22 18:13,16 organic 13:1,12 14:4 24:10 population 22:3 original 11:7 **portion** 4:1 5:16 20:22 R originally 4:3 25:4 Postal 7:8 9:10,22 ratio 25:17 oxide 11:5 16:6 22:22,24 23:11 posted 5:9 7:2 8:4 20:3,12 re-route 12:6 pre-informed 22:7 oxides 12:24 13:10,24 read 18:24 pre-registration 5:17 Ρ ready 10:17 21:5 prepare 5:5 reasoning 8:21 17:12 preregister 5:19 **p.m.** 3:2 recaptured 23:7 preregistered 11:18 18:7 pandemic 4:6 receive 6:11 15:9 present 5:4 parameters 12:16 received 7:2,13 8:5,13 9:21 10:4 presentation 4:1 5:14,15 10:15 12:1 part 25:7,14 11:8 18:15 18:24 19:22 20:24 participating 4:10 recognize 3:18 25:14 presentations 4:24 6:2,13,20 particulate 13:1 recommendation 18:21 previously 7:6 9:13 parts 15:13 25:17 **record** 4:16 5:1 6:7,8,22,24 7:17,22 prior 10:2 8:1,8,11 19:1,24 20:1,10,14 pending 3:14 8:8 9:1 proceed 10:17 21:5 recordkeeping 17:14 Pennsylvania 15:4 **proceeding** 8:1 20:22 **reduce** 23:13 percent 12:14 23:4 proceedings 3:21 6:10 reducing 25:16 performed 12:18 process 8:19 13:3 14:10 15:7 23:7, redundant 22:12 period 9:2 14:19 10,11 25:14 26:2,22 reflect 20:10 permit 3:16 10:24 11:21 12:17 13:2, production 11:5 22:24 4,8,16 14:3,11,12,16,17,20,22 15:2,5, regard 8:8 9:1 profile 24:16 8,20 16:1,10 17:12,16,17,22 18:2 Region 14:18 17:23 19:4,7,15 22:8,15 25:1,6 program 10:19 13:8 17:19 registered 18:6 **permits** 18:10 **project** 17:5 26:20 regulations 17:9 permitted 12:21

property 16:13,23

Protection 14:14

protocol 5:18

proposed 10:9 16:14 20:10

permitting 8:9 10:9 14:10 15:7

21:13 25:5,8 26:21,24

pertinent 7:16

related 11:4

remain 6:10 7:7,11,22 9:3

remarks 3:22 4:20

Croda Inc. Federally Enforceable - June 29, 2021

remember 9:20 screen 20:2 21:3 storage 22:23 removes 22:21 **scrubber** 12:13,16 22:14,20,21 23:1, streams 23:18 24:7 3.14 replace 26:11 **subject** 7:14,16 13:7 **Secretary** 3:19 8:15,17 10:2,7 18:21 replaced 26:7 submit 9:4 18:19 **Secretary's** 7:21 9:5 10:12 replacing 26:9 submitted 9:7,16 10:12 11:2,11,20 Section 6:19 17:22 18:9 Report 8:15 successful 22:1 September 24:2 reporter 5:4 **sulfur** 12:24 serve 3:19 4:13 reporter's 8:3 **Service** 7:9 9:11,22 summary 12:2 reporting 5:11 17:14 sets 13:20 surrounding 17:24 representatives 4:22 settlement 11:2 Synthetic 13:11 representing 20:23 sheets 4:12 system 4:14 request 12:5 21:14 **shown** 20:2 requested 16:8 Т **shut** 24:2 require 12:11 **sign-in** 4:12 T-330 22:21 required 11:2 14:11 16:2 24:23 significant 24:16 table 13:18 requirement 12:13 significantly 26:12 taking 3:5 4:18 requirements 17:4,10 signs 21:23 talk 22:13 25:18,22 reroute 23:6 24:6 single 14:6 talked 22:11 25:2 Resources 3:11 **site** 11:14 16:15 21:10,15,17 22:3,4 talking 22:20 respective 4:11 23:17 24:14 25:24 tank 22:14 23:16,17 respond 18:14 **slide** 22:19 23:15 24:12 25:19.22 tanks 22:23 response 18:17 **small** 24:18.19 technical 11:21 14:20 16:17 17:5,7, responses 18:18 social 9:17 15,17 18:3,11,17 19:12 restrict 14:3 solely 7:14 technically 15:18 **returns** 23:10 **sound** 22:12 technology 26:5,8,11,14 review 8:19 11:9 14:19 16:16 17:2.23 **source** 13:7,10,11,17,19,20,23 15:1 ten 14:7 18:20 **Sources** 14:10 test 21:20 22:1 24:23 reviewed 8:15 17:18 specific 11:23 testing 12:18 17:13 24:3 reviewing 7:3 stack 12:18 24:3,23 text 9:18 reviews 15:11,16 **staff** 15:11 therefor 8:21 **revise** 12:23 standard 9:18 thing 15:10 25:13 revised 11:10 19:6 started 21:12 22:8 things 26:1,14 **room** 4:9 **state** 3:10 4:4 11:13 14:12,17 17:3,8 thought 24:5 19:9.16 S Threshold 13:10 **states** 7:8 9:10,22 14:23,24 18:1 Thresholds 13:17,19,21 scheduled 18:4 statutory 5:78:6 time 3:1,5 4:18 5:20 6:24 20:17 21:18 schedules 3:6 steam 22:17 23:18 26:1

timeline 11:7

Title 13:8 14:11 25:6

today 10:23 21:14,18,20 22:5

tonight 4:17 5:6,24 6:13,22 7:23 8:2, 12 9:1 11:15 18:5

tonight's 3:20 4:1,13 5:16 6:9 7:15

8:7 20:22

tons 13:24 14:5,8 topics 22:10

transcript 5:6,8 8:3,12

translated 25:11

treat 24:19

Tuesday 3:8

turn 3:23 4:21 5:15 10:14

Twitter 9:17 **type** 14:15

U

ultimate 10:5

ultimately 8:18

unit 12:19 24:23

United 7:8 9:10,22

units 11:4

unusual 21:18

update 11:3

updates 25:1

upgraded 26:6

٧

vent 12:12 22:13 24:6

vented 23:22

verbal 11:17 18:5

verbatim 5:5 8:3

verify 16:12,17,23

Vest 3:1,18 19:2,23 20:6,9,19 21:8

vet 10:9

vintage 26:5

virtual 3:10,12

virtually 4:8,17 5:4

volatile 12:24 13:12 14:4 24:10

W

wanted 12:1 15:6 21:14

water 23:18 24:11,21

ways 10:11

wealth 7:3

Webex 4:14

webpage 5:10 6:17 8:4 19:19 20:4,

13

weight 10:1

wishes 6:4 7:20

work 15:24

working 24:4 26:20

worry 22:7

written 8:13 9:5,15 11:19 18:9

Υ

year 14:1,5,8

years 26:6

Youtube 9:18

Ζ

Zone 15:23 16:1,4,10 25:4,8

zoning 16:13