

8/19/15 & 8/20/15

Legg, John C

From: Legg, John C
Sent: Thursday, August 20, 2015 10:07 AM
To: 'James White'
Subject: RE: Disk Submittal - R13-2561K

Jim,

After talking it over with Bev: I did not destroy the non-confidential disk.

I filed both the confidential and non-confidential disks as confidential. I never looked at the two disks, but was concerned that there could be confidential information of the non-confidential marked disk. This was done just to be on the safe side. Also, since the confidential disk was marked "Disk 2," I want Disk 1 to be accounted for.

John

Id. No. 039-00102 Reg. R13-2561K
Company Bayer Material Science, LLC
Facility Charleston Region 4
Initials J.C. Legg

From: James White [mailto:james.white@bayer.com]
Sent: Thursday, August 20, 2015 9:55 AM
To: Legg, John C
Subject: RE: Disk Submittal - R13-2561K

John,

Good working with you. It is nice to be able to discuss old times and what various acquaintances we know are doing now.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Thursday, August 20, 2015 9:46 AM
To: James White
Subject: Disk Submittal - R13-2561K

Jim,

I located the 2 disks you submitted for R13-2561K.

I will file the Claimed Confidential disk with the confidential information already in the files.

The non-confidential disk, I will destroy. The paper copy of the non-confidential application should be sufficient.

John Legg

From: Legg, John C
Sent: Wednesday, August 19, 2015 4:08 PM
To: White, Jimmy R
Subject: R13-2561K -Draft Permit Submitted today 8/19/15

Jim,

Did you submit a disk of your application? I just want to be sure I didn't lose anything.

Do you need anything from me?

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My boss may want me to change something or add additional information. If she does I may have to ask additional questions. Will let you know.

Will let you know when draft permit is signed.

For your information: Evaluation and Approved Permit will be posted online at the following location:

<http://www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx>

It was a pleasure working with you!

John

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8/18, 17, 14/15

Legg, John C

From: James White <james.white@bayer.com>
Sent: Tuesday, August 18, 2015 3:20 PM
To: Legg, John C
Subject: RE: MSDS/ Chemical Involved with R13-2561K

John,

ARCOL Polyol HS-200 and Hyperlite E-855 are final Polymer Polyol products for South Charleston. Other materials listed below help make these products so I would call them reactants. We ship these products (HS-200 and E-855) to our customers (sometimes called foamers because Polyol + isocyanates makes foam) and they add multiple ingredients with the primary ones being toluene isocyanate (TDI) or methylene diisocyanate (MDI) to make polyurethanes.

You summary is correct.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Tuesday, August 18, 2015 2:44 PM
To: James White
Subject: MSDS/ Chemical Involved with R13-2561K

8/18/15 3:20 PM; 2:44 PM; 9:21 AM
9:12 AM; 8:46 AM

Jim,

I won't forget Attachment A.

I wrote a section in the evaluation based on MSDSs submitted in application.

Can you look this over, correct anything that don't look right, and add things that might be important to know.

Are all the products listed below are reactants?

John
MSDS

Id. No. 039-00102 Reg. R13-2561K
Company Bayer Material Science, LLC
Facility S Charleston Region 4
Initials J.C. Legg

final product

The following Material Safety Data Sheets were submitted in the R13-2561K application:

Acrylonitrile

CAS No. 107-13-1. VOC and WV Rule 27 Toxic Air Pollutant (TAP). Reactant used by Bayer to make PMPO. An organic compound with the formula CH₂=CHCN. It is a colorless volatile liquid, although commercial samples can be yellow due to impurities. In terms of its molecular structure, it consists of a vinyl group linked to a nitrile. It is an important monomer for the manufacture of useful plastics such as polyacrylonitrile. It is reactive and toxic. Causes reproductive disorders and birth defects in laboratory animal test. Risk depends on duration and level of exposure.

ARCOL Polyol HS-200

VOC. Chemical Family: Polymer Polyol. Liquid, viscous, white, almost odorless. Boiling point > 392 F. Molecular weight >20,000. Vapor Pressure < 0.001 mg Hg.

ARCOL Polyol R-3688

VOC. Polyol used as a reactant by Bayer to make PMPO. Chemical Family: Polyether Polyol. Liquid, viscous, clear.

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ENTIRE DOCUMENT**

Hyperlite Polyol E-855

product final

VOC. Chemical Family: Polymer Polyol. Liquid, viscous, white. Odor: mild. Boiling point > 392 F. Molecular weight < 130,000. Vapor Pressure < 0.001 mg Hg @ 68F. Slightly soluble in water.

Isopropanol

CAS No. 67-63-0. Rubbing alcohol. VOC. Used as a reactant by Bayer to make PMPO. Colorless, liquid. Odor: Alcohol. Vapor pressure 33 mm Hg @ 20 °C. 100% soluble in water.

3689 Slab
PMPO Stabilizer

VOC. Chemical Family: Polyol. Liquid, light yellow, transparent. Odor - mild.

R-3696 Molded
PMPO Stabilizer

VOC. Chemical Family: Polyol. Liquid, clear to light yellow. Mild odor.

R-3722 Molded PFSI

VOC. Chemical Family: Polyol in Organic Solvent. 40 - 70% Isopropanol; 5-10% Acrylonitrile; 5-10% Styrene. Liquid, milky white color, sweet Aromatic odor.

R-3722 R180
Preblend II (2)

VOC. Chemical Family: Polyol in Organic Solvent. 25-35% Isopropanol. Liquid, colorless to light yellow, alcohol-like odor. 33 mm Hg @ 68F. Partially soluble in water.

R-3723 Slab PFS

VOC. Chemical Family: Polyol in Organic Solvent. 20 - 30% Isopropanol. Liquid, colorless to light yellow, alcohol-like odor. 33 mm Hg @ 68F. Partially soluble in water.

Liquid Catalyst

Identity is confidential.

Another chemical used routinely by Bayer as a reactant used to make PMPO:

Styrene

CAS No. 100-42-5. VOC and HAP. An organic compound with the chemical formula $C_6H_5CH=CH_2$. This derivative of benzene is a colorless oily liquid that evaporates easily and has a sweet smell, although high concentrations confer a less pleasant odor. Styrene is the precursor to polystyrene and several copolymers.

From: James White [mailto:james.white@bayer.com]

Sent: Tuesday, August 18, 2015 9:21 AM

To: Legg, John C

Subject: RE: Changes to Attachment A

John,

Yes, Bayer is OK with submitting draft permit. Don't forget about including Attachment A.

From: Legg, John C [mailto:John.C.Legg@wv.gov]

Sent: Tuesday, August 18, 2015 9:12 AM

To: James White

Subject: RE: Changes to Attachment A

Jim,

Thanks for the info and answering my questions. Any further changes to the engineering evaluation, I will highlight in red.

Will work on eng. evaluation today.

Okay to submit draft permit?

John

From: James White [mailto:james.white@bayer.com]

Sent: Tuesday, August 18, 2015 8:46 AM

To: Legg, John C

Subject: RE: Changes to Attachment A

John,

No changes to PP1 through PP4. Reactor venting system to the thermal oxidizer for all 4 Polymer Polyol reaction trains stayed the same.

From: Legg, John C [mailto:John.C.Legg@wv.gov]

Sent: Monday, August 17, 2015 4:37 PM

To: James White

Subject: FW: Changes to Attachment A

Jim,

See revised Attachment A.

New question: Any changes to lines with sources (PP1 thru PP4) feeding into E-655 related to version K?

Thanks you for the Rule 21 Consent Order Info/language and RACT/BAT discussion.

Previous email: I meant E-686/T-686. Sorry for my mistake. Wanted to be sure it was an oversight. Thanks

John

From: James White [mailto:james.white@bayer.com]

Sent: Monday, August 17, 2015 3:24 PM

To: Legg, John C

Subject: RE: Changes to Attachment A

John,

You said 685 E-686 below. Did you mean that? T-686 YES is the tank I made the change for. In regard to your comment about why now being changed – other permit writers don't seem to want to bother with Attachment A as I stated earlier. 2561H is correct. Laura Jennings was the permit writer. I guess when you did 2561I just forgot to make the change again since Laura did not do it originally.

My error on T-663. I should have put 2561K in the comment box. Service should be – VOC/HAP/TAP. Tank contains acrylonitrile, styrene and isopropanol which are all VOC's, AN is a HAP and TAP and styrene is a HAP.

From our consent order CO-R12-97-37 paragraph 7 – The COMPANY agrees that construction or modification of any emission source having maximum theoretical emissions of VOC equaling or exceeding six pounds per hour after May 1, 1996 shall require the prior approval by the CHIEF of an emission control plan that meets the definition of Reasonably Available Control Technology (RACT) on a case-by-case basis for both fugitive and non-fugitive VOC emissions from such source.

The maximum lb/hr emission from T-663 is around 1 lb/hr so it would not have to meet RACT. Even if T-663 had to meet RACM it would already meet that requirement since BAT is more restrictive than RACT.

From: Legg, John C [mailto:John.C.Legg@wv.gov]

Sent: Monday, August 17, 2015 2:43 PM

To: James White

Subject: Changes to Attachment A

Jim,

I changed Attachment A exactly as you marked up. It is attached, but I have some questions.

I was involved in R13-2561I. I have attached the marked up draft of Attachment A from permit version I. In version I, E-685 was not changed as it is in the markup of Attachment A you just sent me (version K). E-685 says the change occurred in R13-2561H. How come the change to E-685 was not made in version I which followed version H? How come it is just now being marked? I know you approved the change made in I. What this just over-looked until now/version K?

In version K, E-655 (tank T-663) why does your note say R13-2561J? Shouldn't this be R13-2561K? Also, the Service column is left blank. The permit application (Attachment D – Regulatory Discussion) states: "T-663 is subject to WV Reg 27 requirements due to it containing acrylonitrile. Since T-663 is subject to Reg 27 requirements it must meet BAT." Why under Currently subject to RACT it is marked "NO".

John

From: Legg, John C

Sent: Monday, August 17, 2015 11:40 AM

To: 'James White'

Subject: RE: Permit Status

Thanks Jim. Will look it over and get back with you.

From: James White [mailto:james.white@bayer.com]

Sent: Monday, August 17, 2015 11:39 AM

To: Legg, John C

Subject: RE: Permit Status

John,

I have updated the Attachment A. Other changes than were in 2561K were needed. It seems you are the only permit writer who remembers or will update Attachment A.

ATTACHMENT A
8/17/15

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Friday, August 14, 2015 5:01 PM
To: James White
Subject: RE: Permit Status

Yes. I have attached a pdf copy of Attachment A. Make it up and send it back and I will make changes.

From: James White [mailto:james.white@bayer.com]
Sent: Friday, August 14, 2015 4:31 PM
To: Legg, John C
Subject: RE: Permit Status

John,

He did not include an Attachment A in the permit. New EO tank system should have been included in my opinion. Do you want me to update in my comments?

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Friday, August 14, 2015 4:16 PM
To: James White
Subject: FW: Permit Status

Did Steve Pursley in R13-2561J make any changes to Attachment A?

From: Legg, John C
Sent: Friday, August 14, 2015 3:50 PM
To: james.white@bayer.com
Subject: FW: Permit Status

Yes, Tuesday 8/18 is okay!

From: Legg, John C
Sent: Friday, August 14, 2015 3:42 PM
To: 'James White'
Subject: RE: Permit Status

Yes, 8/17 is okay.

Does anything in Attachment A to the permit change?

From: James White [mailto:james.white@bayer.com]
Sent: Friday, August 14, 2015 3:34 PM
To: Legg, John C
Subject: RE: Permit Status

John,

I saw that you had 8/17 on the permit. Is it all right if I comment back you by the end of the day Tuesday (August 18th)? I'm on jury duty and my schedule is really messed up. I have to call in each evening to see if I have to report or not the next day. Fortunately it is only for 30 days.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Friday, August 14, 2015 3:19 PM
To: James White
Subject: RE: Permit Status

I sent you the draft permit in PDF format in addition to word perfect. Try to open the pdf file which was attached.

From: James White [mailto:james.white@bayer.com]

Sent: Friday, August 14, 2015 3:14 PM

To: Legg, John C

Subject: RE: Permit Status

John,

I can't open a Word perfect document so anything you do in that format is unusable to me. See my comments in red below. If you need more on the waste products, let me know.

From: Legg, John C [mailto:John.C.Legg@wv.gov]

Sent: Friday, August 14, 2015 2:45 PM

To: James White

Subject: RE: Permit Status

Am getting ready to submit draft permit to director. I have attached the draft permit. Let me know your comments.

I tried to make a compare file using wordperfect but it makes the changes more complicated than they are, and I gave up. So will didn't get a compare file!

I do have a couple of questions/concerns:

Are the two by-products made from using the liquid catalyst solid or liquid? **Liquid. By-products will go to the waste treatment plant and tanks from which we recycle or ship off site for fuel blending (incineration at cement kiln). Not quite 50/50 split to WTP or recycle/waste tanks, but in that order. We already ship the waste stream to the cement kiln for fuel blending. Waste/recycle tanks are required by permit to vent to thermal oxidizer. Concentrations are in low ppm level to WTP.**

Are the by-products new to the process or the facility? **Main by-products are pivalic acid, t-amyl alcohol, acetone and various other organics in low concentrations. The primary by-products pivalic acid and t-amyl alcohol are new to the site. Acetone is not new to site, but new to manufacturing.**

Also, in the process description, I believe you omitted marking one of the confidential items and left it as it is Bayer will lose confidential information.

Also, when you marked out the calculations with a black marker, I can hold up the paper and read the confidential numbers. **I have ran into that problem before. Sometime I have to create a document without the confidential info and just mark the blanks in black. It is a pain. What do you suggest I do. Re-submit those pages and shred the original?**

If you trust me, I can mark out the information so that it can not be read. **John, Go ahead and mark out. I trust you to do it. Not sure if you are willing to let me do this?**

Also, do you want to read the evaluation I wrote for this permit? It will be posted online with the approved permit. If I got something wrong, the public might get wrong information. It's up to you. Let me know and I will send it. **Yes, please send it to me.**

John

From: James White [mailto:james.white@bayer.com]

Sent: Friday, August 14, 2015 1:32 PM

To: Legg, John C
Subject: Permit Status

John,

How is our permit request going? I hadn't heard anything from you and was wondering if you were on schedule.

Jim White
Bayer MaterialScience LLC
Senior HES Manager
SOUTH CHARLESTON FACILITIES
Phone: +1 304-746-8046
Fax: +1 304-746-8138
E-mail: james.white@bayer.com

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8/17/15

Legg, John C

From: James White <james.white@bayer.com>
Sent: Monday, August 17, 2015 3:35 PM
To: Legg, John C
Subject: RE: Engineering Evaluation

3:35 PM ; 3:31 PM

John,

See my note I sent a few minutes ago on Reg 21.

From: Legg, John C [<mailto:John.C.Legg@wv.gov>]
Sent: Monday, August 17, 2015 3:31 PM
To: James White
Subject: Engineering Evaluation

Jim,

Attached is engineering evaluation.

Still working on how Rule 21 applies to version K of permit.

Any comments would be appreciated.

John

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Id. No. 039-00102 Reg. R13-2561K
Company Bayer Material Science, LLC
Facility S Charleston Region I
Initials JC Legg

E mail

From Jim White

8/17/15

8/17/15 11:39AM

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ENTIRE DOCUMENT

Attachment A
45CSR21 and 45CSR27 Source List

Emission Point Identification	Source Identification	Source Description	Control Device Identification	Service (VOC/HAP/TAP)	Original 45CSR13 Permit	Included in original R21 RACM Plan	Currently subject to:			Comments/Other Applicable Regulations (MACT/BACT/NSPS/NES HAP/etc)
							45CSR21	RACT	45CSR27	
E-600 E-3101 E-3192	C-3101	No. 1 Reactor System	Extended Cookout	VOC/HAP/TAP	R13-2561A	Yes	Yes	No	Yes	MACT Subpart PPP
E-601 E-3201 E-3192	C-3201	No. 2 Reactor System	Extended Cookout	VOC/HAP/TAP	R13-2561A	Yes	Yes	No	Yes	MACT Subpart PPP
E-620 E-3301	T-620	No. 3 Reactor System	Extended Cookout	VOC/HAP/TAP	R13-2561A	Yes	Yes	No	Yes	MACT Subpart PPP
E-636	C-5201	No. 7 Reactor System	Extended Cookout	VOC/HAP/TAP	R13-2561A	Yes	Yes	No	Yes	MACT Subpart PPP
E-637	C-5301	No. 8 Reactor System	Extended Cookout	VOC/HAP/TAP	R13-2561A	Yes	Yes	No	Yes	MACT Subpart PPP
E-638	C-5401	No. 9 Reactor System	Extended Cookout	VOC/HAP/TAP	R13-2561A	Yes	Yes	No	Yes	MACT Subpart PPP
E-647	C-5201	Stabilizer Reactor System	C-5340		None	Yes	No	No	No	C-5340 demolished
E-655		PMPO #1	Y-2124 (S-9)	VOC/HAP/TAP	R13-1182E	Yes	Yes	No	Yes	Normal vent mode is to Thermal Oxidizer, but can vent to atm (E-651)
E-655		PMPO #2	Y-2124 (S-9)	VOC/HAP/TAP	R13-1182E	Yes	Yes	No	Yes	Normal vent mode is to Thermal Oxidizer, but can vent to atm (E-653)
E-655		PMPO #3	Y-2124 (S-9)	VOC/HAP/TAP	R13-1182E	Yes	Yes	No	Yes	Normal vent mode is to Thermal Oxidizer, but can vent to atm (E-652/E-654)

New date

Revised ~~March 5, 2013~~ - R.13-2561A/K

Page 1 of 5

Id. No. 039-00103 Reg. R13-2561A/K

Company Bayco Material Science, LLC

Facility Charleston Region 4

Initials JL Ryger

**Attachment A
45CSR21 and 45CSR27 Source List**

Emission Point Identification	Source Identification	Source Description	Control Device Identification	Service (VOC/HAP/TAP)	Original 45CSR13 Permit	Included in original R21 RACM Plan	Currently subject to:			Comments/Other Applicable Regulations (MACT/BACT/NPDES/HAP/etc)
							45CSR21	RACT	45CSR27	
E-655		PMPO #4	Y-2124 (S-9)	VOC/HAP/TAP	R13-1182E	No	No	No	Yes	Normal vent mode is to Thermal Oxidizer, but can vent to atm (E-658)
E-5550	T-5550	Tank 7 Surge		VOC/HAP/TAP	R13-2561A	Yes	No	No	No	
E-5650	T-5650	Tank 8 Surge		VOC/HAP/TAP	R13-2561A	Yes	No	No	No	
E-5750	T-5750	Tank 9 Surge		VOC/HAP/TAP	R13-2561A	Yes	No	No	No	
E-655	T-626	Tank 626 (Acrylonitrile Tank)	Y-2124 (S-9)	HAP/TAP	R13-2429A	Yes	Yes	No	No	Vents to Thermal Oxidizer
E-666	T-686	Tank 686 (PFS Storage)	Y-2124 (S-9)	VOC/HAP/TAP	R13-1730B	Yes	No	No	No	Vents to Thermal Oxidizer Exempted from Reg 63.1423 by Section 4
E-655	T-663	Tank 663	Y-2124 (S-9)	VOC/HAP/TAP	R13-2429A	Yes	Yes	Yes	No	Vents to Thermal Oxidizer HAP/TAP Exempted from Reg 63.1423 K
N/A	C-102	Tank North Sphere		HAP/TAP	R13-2561A	Yes	Yes	No	No	Exempted by 40 CFR 63.1423
N/A	C-101	Tank South Sphere		HAP/TAP	R13-2561A	Yes	Yes	No	No	Exempted by 40 CFR 63.1423
N/A	T-9016	Tank 9016 (PO Storage - NC)		HAP/TAP	R13-2561A	Yes	Yes	No	No	Exempted by 40 CFR 63.1423
N/A	T-9017	Tank 9017 (PO Storage - NC)		HAP/TAP	R13-2561A	Yes	Yes	No	No	Exempted by 40 CFR 63.1423
N/A	T-9018	Tank 9018		Removed From Service	R13-2561A	Yes	Yes	No	No	Lyondell Chemical is the current owner.
E-662	C-3404	No. 1 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	No	Deminimus TAP's

New Date
Revised March 5, 2012 - R13-2561A K

**Attachment A
45CSR21 and 45CSR27 Source List**

Emission Point Identification	Source Identification	Source Description	Control Device Identification	Service (VOC/HAP/TAP)	Original 45CSR13 Permit	Included in original R21 RACM Plan	Currently subject to:			Comments/Other Applicable Regulations (MACT/RACT/NESHAP/HAP/etc)
							45CSR21	RACT	45CSR27	
E-663	C-3406	No. 1 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	
	C-3504	No. 2 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	
	C-3506	No. 2 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	
E-664	C-3604	No. 5 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	
	C-3606	No. 5 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	
E-608	H-3477	No. 1 Refining System Vacuum Jets		VOC/HAP/TAP	R13-2561A	No	No	Yes	Deminimus TAP's	
E-609	H-3577	No. 2 Refining System Vacuum Jets		VOC/HAP/TAP	R13-2561A	No	No	Yes	Deminimus TAP's	
E-610	H-3677	No. 5 Refining System Vacuum Jets		VOC/HAP/TAP	R13-2561A	No	No	Yes	Deminimus TAP's	
E-640	C-5504	No. 7 Refining System		VOC/HAP/TAP	R13-2561A	No	Yes	No	Deminimus TAP's	
E-643	C-5506	No. 7 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	
E-641	C-5604	No. 8 Refining System		VOC/HAP/TAP	R13-2561A	No	Yes	No	Deminimus TAP's	
E-644	C-5606	No. 8 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	
E-642	C-5704	No. 9 Refining System		VOC/HAP/TAP	R13-2561A	No	Yes	No	Deminimus TAP's	
E-645	C-5706	No. 9 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	
E-5804	C-5804	No. 10 Refining System		VOC/HAP/TAP	R13-2561A	No	Yes	Yes	Deminimus TAP's	
E-5806	C-5806	No. 10 Refining System		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus TAP's	

New data
Revised March 5, 2012 - R13-2561A K

**Attachment A
45CSR21 and 45CSR27 Source List**

Emission Point Identification	Source Identification	Source Description	Control Device Identification	Service (VOC/HAP/TAP)	Original 45CSR13 Permit	Included in original R21 FACM Plan	Currently subject to:			Comments/Other Applicable Regulations (MACT/RACT/NSPS/INES HAP/etc)
							45CSR21	RACT	45CSR27	
E-658	H-2443	PMPO #4 Vacuum Jets			R13-1182E	No	No	No	Yes	Option to operate while not venting to T.O. removed. Covered by PMPO requirement now.
E-655	Y-2124	Thermal Oxidizer	S-9	VOC/HAP/TAP	R13-1182E	Yes	Yes	Yes	Yes	
E-655	D-2124A	Scrubber	C-658		R13-1182E	No	No	No	No	Scrubber D-2124A [C-658] removed from service
E-655	T-631	Tank 631	Y-2124 (S-9)	VOC/HAP/TAP	R13-2429A	No	No	No	Yes	
E-655	T-632	Tank 632 (PFS Storage)	Y-2124 (S-9)	VOC/HAP/TAP	R13-1730B	No	Yes	Yes	Yes	
E-655	T-616	Tank 616 (Wastewater Storage/Decanter)	Y-2124 (S-9)	VOC/HAP/TAP	R13-2429A	No	No	No	Yes	
E-655	T-693	Tank 693 (Waste Monomer Tank)	Y-2124 (S-9)	VOC/HAP/TAP	R13-2429A	No	No	No	Yes	
E-683	T-683	Tank 683 (Styrene)		HAP	R13-2429A	No	No	No	No	Not in acrylonitrile service Subject to Reg. 21, Section 37 LDAR
E-687	T-687	Tank 687 (Styrene)		Placed into Styrene (HAP) Service 07/2013 under R13-25611	R13-2429A	No	No	No	No	Subject to Reg. 21, Section 37 LDAR

New Data
Revised March 5, 2013 - R13-25611/k

**Attachment A
45CSR21 and 45CSR27 Source List**

Emission Point Identification	Source Identification	Source Description	Control Device Identification	Service (VOC/HAP/TAP)	Original 45CSR13 Permit	Included in original R21 RACM Plan	Currently subject to:			Comments/Other Applicable Regulations (MACT/BACT/MS/PS/NES HAP/etc)
							45CSR21	RACT	45CSR27	
E-1463	T-1463	Tank 1463 (Intermediate or Make Tank)		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus HAP/TAP's	
E-1464	T-1464	Tank 1464 (Intermediate or Make Tank)		VOC/HAP/TAP	R13-2561A	No	No	No	Deminimus HAP/TAP's	
E-1458	T-1458	Tank 1458 (#2 ISOP/Polyol)		VOC	R13-1730B	No	No	No	No longer contains HAP/TAP's	
E-684	T-684	Tank 684 (Performed Stabilizer)	Y-2124 (S-9)	VOC/HAP/TAP	R13-1730B	No	No	No	Vents to Thermal Oxidizer	
E-7101	C-7000	C-7000 (EO tank ancillary equipment)	Y-7101 (EO scrubber)	VOC/HAP/TAP	R13-2561J	No	No	Yes	PPP MACT	
E-1461	T-1461	Tank 1461 (#2 ISOP/Polyol)		VOC	R13-2561K	No	No	No		

New Date
Revised March 5, 2013 - R13-2561JK

8/14/15

Legg, John C

From: James White <james.white@bayer.com>
Sent: Friday, August 14, 2015 3:26 PM
To: Legg, John C
Subject: RE: Permit Status

3:26 PM

Yes, I can open the pdf. I was just trying to let you know that if you wanted to put a summary in Word Perfect for me it is a waste of your time.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Friday, August 14, 2015 3:19 PM
To: James White
Subject: RE: Permit Status

I sent you the draft permit in PDF format in addition to word perfect. Try to open the pdf file which was attached.

From: James White [mailto:james.white@bayer.com]
Sent: Friday, August 14, 2015 3:14 PM
To: Legg, John C
Subject: RE: Permit Status

John,

I can't open a Word perfect document so anything you do in that format is unusable to me. See my comments in red below. If you need more on the waste products, let me know.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Friday, August 14, 2015 2:45 PM
To: James White
Subject: RE: Permit Status

Am getting ready to submit draft permit to director. I have attached the draft permit. Let me know your comments.

I tried to make a compare file using wordperfect but it makes the changes more complicated than they are, and I gave up. So will didn't get a compare file!

I do have a couple of questions/**concerns:**

Are the two by-products made from using the liquid catalyst solid or liquid? **Liquid. By-products will go to the waste treatment plant and tanks from which we recycle or ship off site for fuel blending (incineration at cement kiln). Not quite 50/50 split to WTP or recycle/waste tanks, but in that order. We already ship the waste stream to the cement kiln for fuel blending. Waste/recycle tanks are required by permit to vent to thermal oxidizer. Concentrations are in low ppm level to WTP.**

Are the by-products new to the process or the facility? **Main by-products are pivalic acid, t-amyl alcohol, acetone and various other organics in low concentrations. The primary by-products pivalic acid and t-amyl alcohol are new to the site. Acetone is not new to site, but new to manufacturing.**

Also, in the process description, I believe you omitted marking one of the confidential items and left it as it is Bayer will lose confidential information.

NON-CONFIDENTIAL

Id. No. 039-00102 Reg. R13-2561K
Company Bayer Material Sciences
Facility SCharleston Region 4
Initials JL Legg LLC

8/17, 14/15

Legg, John C

From: James White <james.white@bayer.com>
Sent: Monday, August 17, 2015 2:38 PM
To: Legg, John C
Subject: RE: Permit Status
Attachments: 20150817130949.pdf

8/17/15 238PM

8/14/15 245PM

ATTACHMENT

John,

My comments to the draft permit are noted on the attached permit pages.

- T-616 can no longer vent to the air with the removal of line item 6.1.10 (emergency vent valve).
- Line item 4.2.2b was for the scrubber for the solid catalyst addition that we will no longer need due to the switch to a liquid catalyst.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Friday, August 14, 2015 2:45 PM
To: James White
Subject: RE: Permit Status

Am getting ready to submit draft permit to director. I have attached the draft permit. Let me know your comments.

I tried to make a compare file using wordperfect but it makes the changes more complicated than they are, and I gave up. So will didn't get a compare file!

I do have a couple of questions/concerns:

Are the two by-products made from using the liquid catalyst solid or liquid?

Are the by-products new to the process or the facility?

Id. No. 039-00102 Reg. R13-2561K
 Company Bayer Material Science
 Facility SCharleston Region F
 Initials JL Legg

Also, in the process description, I believe you omitted marking one of the confidential items and left if this is left as it is Bayer will lose confidential information.

Also, when you marked out the calculations with a black marker, I can hold up the paper and read the confidential numbers.

If you trust me, I can mark out the information so that it can not be read. Not sure if you are willing to let me do this?

Also, do you want to read the evaluation I wrote for this permit? It will be posted online with the approved permit. If I got something wrong, the public might get wrong information. It's up to you. Let me know and I will send it.

John

From: James White [mailto:james.white@bayer.com]
Sent: Friday, August 14, 2015 1:32 PM
To: Legg, John C
Subject: Permit Status

John,

How is our permit request going? I hadn't heard anything from you and was wondering if you were on schedule.

NON-CONFIDENTIAL
ENTIRE DOCUMENT

EMAIL ATTACHMENT
 JIM WHITE 2:38PM

8/17/2015



Emissions Unit ID	Emission Point ID	Emissions Unit Description	Control Device
C-2016	n/a	C-2016 ACN treater	APCD
T-616	E-655	Storage/decanting of wastewater	Vents to T.O. & atm (limited permitted -amt) → E-655
T-693	E-655	Waste monomer tank	vent to T.O. E-655
Y-2124	E-655	Thermal Oxidizer/Scrubber	Vents to atm
T-8464	E-8464	Rx vessel/blending	VOC's, MDI low emissions
T-8461	E-8461	Storage	atm vent
T-8466	E-8466	Storage	atm vent
T-8462	E-8462	Storage	atm vent
T-112	E-112	Storage	atm vent
PMPO Storage and Ancillary Equipment			
T-70	E-70	Final Product Storage	atm vent
T-71	E-71	Final Product Storage	atm vent
T-72	E-72	Final Product Storage	atm vent
T-73	E-73	Final Product Storage	atm vent
T-74	E-74	Final Product Storage	atm vent
T-75	E-75	Final Product Storage	atm vent
T-76	E-76	Polyol blending	atm vent
T-77	E-77	Polyol blending	atm vent
T-78	E-78	Polyol blending	atm vent
T-79	E-79	Polyol blending	atm vent
T-80	E-80	Final Product Storage	atm vent
T-81	E-81	Final Product Storage	atm vent
T-82	E-82	Final Product Storage	atm vent
T-83	E-83	Final Product Storage	atm vent
T-84	E-84	Final Product Storage	atm vent
T-85	E-85	Final Product Storage	atm vent
T-86	E-86	Final Product Storage	atm vent
T-87	E-87	Final Product Storage	atm vent
T-88	E-88	Final Product Storage	atm vent
T-89	E-89	Final Product Storage	atm vent
T-90	E-90	Final Product Storage	atm vent
T-91	E-91	Final Product Storage	atm vent

- 4.1.3. The following provision only applies to the Polymer Polyol Production Unit #4 production unit:

Remove
spacing

During normal operations, emissions from the Polymer Polyol Production Unit #4 vacuum jet
condenser vent are to be routed to the thermal oxidizer (File under R13-1729A; ID: S-9), and
subsequently vented through emission point E-655.

not
in
original

- 4.1.4. During normal operations, the permittee shall vent emissions from the following sources at all times to the thermal oxidizer, prior to being released to the atmosphere through emission point E-655:
- Vacuum jet condenser vents from each of the Polymer Polyols process units (PP1, PP2, PP3, and PP4).
 - Acrylonitrile Storage Tank T-626, Wastewater Storage Tank T-616, Waste Monomer Storage Tank T-693, and the Recovered Alcohol Tanks T-631 and T-109.
 - Switch Rack #8 when loading waste monomer and recovered alcohol into portable storage vessels.
- 4.1.5. The following provisions only apply to the thermal oxidizer(Y-2124):
- The thermal oxidizer shall be operated and maintained in such a manner that this control device will have a destruction and/or removal efficiency of greater than 98% for hazardous air pollutants as defined by U.S. EPA and volatile organic compounds.
 - The thermal oxidizer shall be operated such that the combustion chamber temperature shall not fall more than 167°F (75°C) below the temperature monitored during the most recent performance test showing compliance with Section 4.1.1. of this permit for periods of time which do not exceed three (3) hours or 1832°F (1000°C); whichever is greater.
 - The flow rate of waste gas going to the thermal oxidizer and scrubber system shall not exceed an one hour average of 514 pounds per hour.
- 4.1.6. During periods of shutdown and/or malfunction of the waste gas thermal oxidizer or waste gas header, the permittee may utilize the emergency vents: E-651, E-653, E-652/E-654 and E-658 if all of the following conditions are met:
- Total vent time in a calendar year for the emergency vents does not exceed 2,800 hours for jet pots T-2148, T-2248, T-2348 and T-2448 when organic is present. (Note: if a jet pot is empty or only contains water then vent time does not count against the yearly limit).
- 4.1.7. Fugitive emissions from equipment (e.g. pipes, pumps, flanges, etc.) in the PP1, PP2, PP3, and PP4 process units, which is placed in toxic air pollutant service, as defined by 45CSR27-2.11, shall be integrated into the existing Leak Detection And Repair (LDAR) program. This LDAR program shall comply with the provision of 40CFR63 Subpart H. The permittee shall implement Phase III as prescribed in Subpart H.
- 4.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment and associated monitoring equipment listed in Section 1.0 and affected by Section 4.0 of this permit in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal

regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

- 4.2.1. For the purpose of demonstrating compliance with the limits set forth in Section 4.1.1. and 4.1.2. of this permit, the permittee shall monitor the production rates and the hours of operation of each of the polymer polyol production units, PP1, PP2, PP3, and PP4. Compliance with the annual limits set forth in Section 4.1. shall be determined using a 12-month rolling total. A 12-month rolling total shall mean the total throughput in gallons at any given time for the previous twelve (12) consecutive calendar months.
- 4.2.2. For the purpose of demonstrating compliance with the limits set forth in Section 4.1.3., 4.1.4., 4.1.5., and 4.1.6. of this permit, the permittee shall conduct the following parametric monitoring:
- a. Combustion chamber temperature of the thermal oxidizer, Y-2124, and the flow rate of waste gas into the thermal oxidizer
 - ~~b. Liquid flow rate of the Ceilcote, EVS-~~8~~ Eductor System, V-~~7493~~~~
 - ~~b~~ Emergency venting hours for E-651, E-653, E-652/E-654 (not additive), and E-658.

4.3. Testing Requirements

[Reserved]

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 and affected by Section 4.0 of this permit, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 and affected by Section 4.0 of this permit, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the

8/5/15

Legg, John C

From: James White <james.white@bayer.com>
Sent: Wednesday, August 05, 2015 11:55 AM
To: Legg, John C
Subject: RE: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

11:55 AM

John,

Particulate emissions from the dumping of the solid catalyst to the mix pots are very small. We purchase a granular type of catalyst because powder tends to plug up the charge funnel and the operator has to rod it out. The PP1 catalyst mix tank (T-2305) was not required to have dust control in the original permit which was issued to Union Carbide in 1984. Union Carbide built the Polymer #4 unit about 1988 and included dust collection for the catalyst mix tank in the permit application. I really don't know why Union Carbide included dust collection based upon the amount of particulates generated unless their engineering estimates for particulate emissions were in error. ARCO Chemical purchased the Polyol business from Union Carbide in 1989 and we inherited the dust control requirement as part of the Polymer #4 permit.

We add several hundred pounds of catalyst per charge (1 – 2 charges per day for each of the catalyst mix tanks) and I doubt we get more than a thimble full of particulate dust. Since we will only be using the solid catalyst on Polymer #1, we will likely only have an addition to the Polymer #1 catalyst mix tank 1 – 2 times a week. The majority of catalyst we see that doesn't make it into the mix tank is spilled out of the charge funnel. Catalyst is added from about 30 gal fiber paks. We were required to test inlet particulate emissions to the scrubber in 2003 and the average inlet particulate amount to the scrubber was 4.42 E-04 lb/hr. Total charge time is 5 – 10 minutes

We would not trigger any emission trigger. If I was going to guess, I would conservatively estimate we would emit less than 10 lbs of particulates a year from the PP1 catalyst addition. Our total amount of particulate emissions at the site are small. Large majority of our raw materials and products are liquids and our thermal oxidizer operates on natural gas. DOW supplies steam to us so we do not have boilers. Only regulation that might come into play is 45 CSR 7. I would hope we would not have to spend a significant amount of money to reduce particulates emissions of 10 lbs per year for Reg 7.

I hope I answered your questions. Let me know if I need to provide any more info or clarification.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Wednesday, August 05, 2015 11:12 AM
To: James White
Subject: RE: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

Jim,

How can Bayer make polymer polyol in unit PP1 (for customers that want the polyol made using solid catalyst) when the ventura scrubber has been removed and T-2305 is vented to the atmosphere?

Would this not trigger more stringent regulations related to the polymer polyol unit being a synthetic minor?

I am still reviewing your application.

John

From: James White [mailto:james.white@bayer.com]
Sent: Monday, July 27, 2015 11:17 AM
To: Legg, John C
Subject: RE: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

John,

See my responses below in red.

NON-CONFIDENTIAL

Id. No. 039-00102 Reg. R13-256/K
Company Bayer Material Science, LLC
Facility South Charleston Region 4
Initials J.C. Legg

7/27, 23, 22, 21, 20, 17/15

Legg, John C

From: James White <james.white@bayer.com>
Sent: Monday, July 27, 2015 11:17 AM
To: Legg, John C
Subject: RE: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

John,

See my responses below in red.

Let me know if you need additional clarification.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Thursday, July 23, 2015 4:02 PM
To: James White
Subject: FW: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

Jim,

7/27/15 1117AM

7/23/15 402PM

7/22/15 910AM; 855AM

7/21/15 441PM

7/20/15 812AM

7/17/15 408 PM

Page 10 of application under PMPO Support System: Why is Tank T-616 not shown with proposed changes about eliminating control valve HV-61609? I didn't see T-616 on page 10 of the application. I should have included. T-616 is on page 8 of the R-13 permit. The comment under control device needs to be modified to "Vents to T.O." Removed "& atm (limited permitted amt)". When we added the steam stripper and replaced T-616 some years ago it was felt an emergency vent was needed to prevent popping the tank relief valve when the stripper shut down suddenly, but it turned out this was not the case and the emergency vent valve was removed.

Replacement of cat mix tank: Does this mean Replacement of catalyst mix tank T-2405 venting through venturi scrubber (V-2493) in PP4 with same catalyst mix tank T-2405 venting to atmosphere now in PMPO Feed System? No, we are replacing the catalyst mix tan T-2405 with another vessel of the same size and similar configuration. Material of construction of new tank is stainless steel. Old T-2405 was carbon steel and not compatible with new catalyst. New catalyst is a liquid and old catalyst was a solid so no dust collection is required.

Your comment on page 10, PMPO Feed System, T-2405, control vent, comment: Feeds PMPO#2 (PP2) and #4 (PP4) with new cat. Do it feed PP1 and PP3 also? Yes, it feeds PP3. On my application copy PP3 is not shown. I'm not sure if the copier cut it off on my copy, but you have the original so it should have shown so maybe I left off. PP1 will still use the old catalyst. Catalyst/Flex Polyol mixture for PP1 is generated in different equipment than T-2405 and the PP1 catalyst mix tank (T-2305) and Flex/catalyst storage tanks (T-1459 and T-1460) will be dedicated to PP1. Today T-2305 supplies the Flex Polyol catalyst mixture to PP1, PP2 and PP3, but after the catalyst change will only feed PP1. Currently T-2405 only feeds PP4.

No notes in emission units table about changes to be made to C2044, wastewater stripper? As far as the table on page 8 of the current permit goes nothing changed. We are modifying the diameter of the column and the internals - going from all plates to half plates and half packing. Since the hydraulic flow to the column is being changed dramatically the larger diameter column is not needed. On page 7 of application we state we plan to conduct a performance test for the modified wastewater stripper column. Some of the wastewater stripper column requirements in 6.1.12 (a, c and d) may need to be changed. B and e are not expected to be affected by changes.

Page 7 in application, 1st paragraph, 6.1.11. Should this be 6.1.12? Yes, my error.

Id. No. 039-00102 Reg. R13-2561 K
Company Bayer Material Science, LLC
Facility Charleston Region 4
Initials J.C. Legg

NON-CONFIDENTIAL
ENTIRE DOCUMENT

T-103 and T-104 in the PP4 area were once labeled Cat/Flex Stg. You changed the label to Storage. Is it still Flex Storage? Or will something fixed always be stored in these tanks? T-103 and T-104 today are Flex Polyol and catalyst mixture storage tanks. With the catalyst changes Flex/catalyst storage tanks are not need except for PP1 which will continue to use old solid catalyst. We have not finalized what we plan to do with T-103 and T-104 which is why I put storage in the description. T-103 and T-104 are not needed for the process. My expectation is that we will ultimately use T-103 and T-104 for intermediate Polymer Polyol intermediate storage. Manufacturing is always wanting more storage tanks. Polymer Polyols is basically Flex Polyol and polymerized monomer mixed and cross linked together. As part of our management of change process for change of service to tanks I evaluate any required permit changes per Reg 13.

From: Legg, John C
Sent: Wednesday, July 22, 2015 9:10 AM
To: 'James White'
Subject: RE: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

Thanks Jim. Good answers. Will be working on your permit. Hope to finish soon!

From: James White [mailto:james.white@bayer.com]
Sent: Wednesday, July 22, 2015 8:55 AM
To: Legg, John C
Subject: RE: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

John,

The permit writer (Steve Pursley) for version "J" changed the cover page to "J", but forgot to change the heading on all the other pages from "I" to "J."

T-8461 is used today to store a Polyol (E-917) and for the proposed process changes in the permit application T-8461 will be used to store a slightly different Polyol (R-3689). R-3689 is in the same family of Polyols as E-917. Both Polyols (R-3689 and E-917) have the same ingredients, but the recipe is change slightly different. E-917 and R-3689 use different Polyether Polyol as raw materials. The difference in the Polyether Polyol is the amount of ethylene oxide and propylene oxide. Since nothing changed with the description of T-8461 in section 1.0, I did not attach that page. I attached for reference.

I think some of the confusion with T-2248, E-655 and E-653 is our copier. There is no change in the operation of these three items. The line on Page 8 of the application going through T-2248 should not have been there. T-2248 is a process decanter (separates organic from water) and serves as hot well for steam jets. Normal operation is for T-2248 to vent to the waste gas header which vents to the thermal oxidizer. During periods of shutdown and/malfunction we can vent to the atmosphere (4.1.6) through air emission point E-653.

If I didn't full clarify your questions, give me a call and we can discuss.

From: Legg, John C [mailto:John.C.Legg@wv.gov]
Sent: Tuesday, July 21, 2015 4:41 PM
To: James White
Subject: RE: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

Jim,

Working on your permit.

Question: Why was verison "I" instead of "J" used to markup/ make changes to, i.e., the marked up "1.0 Emission Units Table" shows "I" as the version number. I am working on version "K".

T-8461 is not in the marked up Emission Units Table. Why?

ATTACHMENT

Can you explain some about T-2248 E-655 and E-653 and the marked out one in the Emission Units Table?

John

From: James White [mailto:james.white@bayer.com]

Sent: Monday, July 20, 2015 8:12 AM

To: Legg, John C

Subject: RE: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

John,

Thanks for letting me know. As I said earlier there are no large changes in the administrative permit request. Just multiple changes. Let me know if you have any questions.

From: Legg, John C [mailto:John.C.Legg@wv.gov]

Sent: Friday, July 17, 2015 4:08 PM

To: James White

Subject: FW: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

Jim,

I deemed you application complete. The attached letter has been mailed to you via US mail.

John Legg
Permit Writer
Division of Air Quality
501 57th Stree, SE
Charleston, WV 25304

From: Adkins, Sandra K

Sent: Monday, June 29, 2015 4:24 PM

To: glenn.kraynie@bayer.com

Cc: Mckeone, Beverly D; Legg, John C

Subject: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

**RE: Application Status
Bayer MaterialScience LLC
South Charleston Facility
Plant ID No. 039-00102
Application No. R13-2561K**

Mr. Kraynie,

Your application for a Class II Administrative Update permit for the South Charleston facility was received by this Division on June 25, 2015, and was assigned to John Legg.

Within 30 days, you should receive a letter from John Legg stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

EMAIL FROM JIM WHITE
7/22/15 8:55 AM

7/22/15

Permit R13-2561J
Bayer Material Science, LLC • South Charleston, WV

Page 8 of 57

Emissions Unit ID	Emission Point ID	Emissions Unit Description	Control Device
C-2044	E-655	"MON" NESHAP Waste Water HAP Stripper w/ E-2045 Condenser and E-2057 Feed Preheater	Y-2124 CTO Incinerator/ Scrubber
C-2016	n/a	C-2016 ACN treater	APCD
T-616	E-655	Storage/decanting of wastewater	Vents to T.O. & atm (limited permitted amt)
T-693	E-655	Waste monomer tank	vent to T.O. E-655
Y-2124	E-655	Thermal Oxidizer/Scrubber	Vents to atm
T-8464	E-8464	Rx vessel/blending	VOC's, MDI low emissions
T-8461	E-8461	Storage	atm vent
T-8466	E-8466	Storage	atm vent
T-8462	E-8462	Storage	atm vent
T-112	E-112	Storage	atm vent
PMPO Storage and Ancillary Equipment			
T-70	E-70	Final Product Storage	atm vent
T-71	E-71	Final Product Storage	atm vent
T-72	E-72	Final Product Storage	atm vent
T-73	E-73	Final Product Storage	atm vent
T-74	E-74	Final Product Storage	atm vent
T-75	E-75	Final Product Storage	atm vent
T-76	E-76	Polyol blending	atm vent
T-77	E-77	Polyol blending	atm vent
T-78	E-78	Polyol blending	atm vent
T-79	E-79	Polyol blending	atm vent
T-80	E-80	Final Product Storage	atm vent
T-81	E-81	Final Product Storage	atm vent
T-82	E-82	Final Product Storage	atm vent
T-83	E-83	Final Product Storage	atm vent
T-84	E-84	Final Product Storage	atm vent
T-85	E-85	Final Product Storage	atm vent
T-86	E-86	Final Product Storage	atm vent
T-87	E-87	Final Product Storage	atm vent
T-88	E-88	Final Product Storage	atm vent
T-89	E-89	Final Product Storage	atm vent

Id. No. 039-00102 Reg. R13-2561K
 Company Bayer Material Science, LLC
 Facility Charleston Region 4
 Initials J.L. [Signature]



7/17/15

west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

July 17, 2015

Jim White
501 Second Avenue
South Charleston, WV 25303

Id. No. _____ Reg. _____
Company _____
Facility _____ Region 4
Initials JL

RE: Application Status: Complete
Bayer Material Science LLC
South Charleston, WV
Permit Application R13-2561K
Plant ID No. 039-00102

Dear Mr. White:

Your application for a Class II Administrative Update permit for multiple changes to be made to your current permit (R13-2561J) was received by this Division on June 25, 2015 and assigned to the writer for review on June 29, 2015. Upon review of said application, it has been determined that the application is complete as submitted and, therefore, the statutory review period commenced on June 29, 2015.

In the case of this application, the agency believes it will take approximately 60 days from the date your application was deemed complete to make a final permit determination, the approximate date being August 28, 2015.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact me at (304) 926-0499 ext. 1227.

Sincerely,

John Legg
Permit Writer

NON-CONFIDENTIAL



Permit / Application Information Sheet
Division of Environmental Protection
West Virginia Office of Air Quality

6/29/15

Company:	Bayer MaterialScience LLC	Facility:	South Charleston
Region:	4	Plant ID:	039-00102
Application #:	13-2561K		
Engineer:	Legg, John	Category:	Chemical
Physical Address:	437 MacCorkle Avenue, SW South Charleston WV 25303	SIC: [2869] CHEMICALS AND ALLIED PRODUCTS - INDUSTRIAL ORGANIC CHEMICALS, NEC NAICS: [325199] All Other Basic Organic Chemical Manufacturing SIC: [2899] CHEMICALS AND ALLIED PRODUCTS - CHEMICAL PREPARATIONS, NEC NAICS: [311942] Spice and Extract Manufacturing	
County:	Kanawha	SIC: [2869] CHEMICALS AND ALLIED PRODUCTS - INDUSTRIAL ORGANIC CHEMICALS, NEC NAICS: [325110] Petrochemical Manufacturing	
Other Parties:	VICE PRES - Kraynie, Glenn 304-746-8021 Contact - WHITE, JAMES H. (304)-746-8046		

Information Needed for Database and AIRS
 1. Need valid physical West Virginia address with zip

Regulated Pollutants

Summary from this Permit 13-2561K		
Air Programs	Fee	Applicable Regulations
	\$300.00	ADMINISTRATIVE

Notes from Database

Activity Dates

APPLICATION RECIEVED	06/25/2015
APPLICATION FEE PAID	06/29/2015
ASSIGNED DATE	06/29/2015

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Please note, this information sheet is not a substitute for file research and is limited to data entered into the AIRTRAX database.

Company ID: 039-00102
 Company: Bayer MaterialScience LLC
 Printed: 06/29/2015
 Engineer: Legg, John

6/29/15

Legg, John C

From: Adkins, Sandra K
Sent: Monday, June 29, 2015 4:24 PM
To: glenn.kraynie@bayer.com
Cc: McKeone, Beverly D; Legg, John C
Subject: WV DAQ Permit Application Status for Bayer MaterialScience LLC; South Charleston

RE: Application Status
Bayer MaterialScience LLC
South Charleston Facility
Plant ID No. 039-00102
Application No. R13-2561K

Mr. Kraynie,

Your application for a Class II Administrative Update permit for the South Charleston facility was received by this Division on June 25, 2015, and was assigned to John Legg.

Within 30 days, you should receive a letter from John Legg stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

Should you have any questions, please contact the assigned engineer, John Legg, at 304-926-0499, extension 1257.

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Id. No. 039-00102 Reg. R13-2561K
Company Bayer Material Science, LLC
Facility S. Charleston Region A
Initials J.C. Legg

Attachments
Title V

039-00102
R13-2561K
Clan Hall
John
6/29/15

45CSR13 Administrative Update, Construction, Modification, Relocation, Temporary Permit or General Permit Registration Incomplete Application

A complete application is demonstrated when all of the information required below is properly prepared, completed and attached. The items listed below are required information which must be submitted with a 45CSR13 permit application. Any submittal will be considered incomplete if the required information is not included. The applicant must submit a complete application in order to receive a 45CSR13 permit.

- Class I legal advertisement not published in a newspaper certified to accept legal advertisements and original affidavit submitted.
- Application fee AND/OR additional application fees not included:
 - \$250 Class I General Permit
 - \$300 Class II Administrative Update
 - \$1,000 Construction, Modification, Relocation or Temporary Permit
 - \$500 Class II General Permit
 - \$1,000 NSPS
 - \$2,500 NESHAP
 - \$2,500 45CSR27 Pollutant
 - \$5,000 Major Modification
 - \$10,000 Major Construction

Id. No. 039-00102 Reg. R13-2561K
 Company Bayer Material Science, LLC
 Facility South Charleston Region 4
 Initials JC Legg

- Original and two (2) copies of the application not submitted.
- File organization – application pages are not numbered or in correct order, application is not bound in some way, etc.
- Confidential Business Information is not properly identified.
- General application forms not completed and signed by a responsible official.
- Authority of Corporation form not included – required if application is signed by someone other than a responsible official.
- Applicant is not registered with the West Virginia Secretary of State's Office.
- Copy of current Business Registration Certificate not included.
- Process description, including equipment and emission point identification numbers, not submitted.
- Process flow diagram, including equipment and emission point identification numbers, not submitted.
- Plot plan, including equipment and emission point identification numbers, not submitted.
- Applicable technical forms not completed and submitted:
 - Emission Point Data Summary Sheets
 - Air Pollution Control Device Sheets
 - Emission Unit Data Sheets
 - Equipment List Form
- Emission calculations not included – emission factors, references, source identification numbers, etc.
- Electronic submittal diskette not included.