

**From:** Pineda, Christine <Christine.Pineda@nrc.gov>  
**Sent:** Tuesday, May 21, 2019 9:32 AM  
**To:** 'Patterson, Charles'; Tiktinsky, David  
**Cc:** Sanders, Robert  
**Subject:** RE: FW: 1) Environmental Information Needs - Rev 0 and 2) Creosote Remedial Action Report (July 2014)

Thank you!

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**From:** Patterson, Charles <Sean.Patterson@Honeywell.com>  
**Sent:** Tuesday, May 21, 2019 10:39 AM  
**To:** Tiktinsky, David <David.Tiktinsky@nrc.gov>; Pineda, Christine <Christine.Pineda@nrc.gov>  
**Cc:** Sanders, Robert <Robert.Sanders2@Honeywell.com>; Patterson, Charles <Sean.Patterson@Honeywell.com>  
**Subject:** [External\_Sender] FW: 1) Environmental Information Needs - Rev 0 and 2) Creosote Remedial Action Report (July 2014)

We have uploaded some documents to Daptiv.

Sean

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**From:** Sanders, Robert  
**Sent:** Tuesday, May 21, 2019 9:34 AM  
**To:** Patterson, Charles <[Sean.Patterson@Honeywell.com](mailto:Sean.Patterson@Honeywell.com)>  
**Cc:** Sanders, Robert <[Robert.Sanders2@Honeywell.com](mailto:Robert.Sanders2@Honeywell.com)>  
**Subject:** 1) Environmental Information Needs - Rev 0 and 2) Creosote Remedial Action Report (July 2014)

The subject documents were just uploaded to the Daptiv Site.

Thanks,  
Bob

**Bob Sanders**  
Sr. Quality Engineer – Regulatory Affairs  
**Honeywell** | PMT  
Office: 618.524.6362  
New Cell Phone: 618-645-2034

[Robert.sanders2@honeywell.com](mailto:Robert.sanders2@honeywell.com)  
[honeywell.com](http://honeywell.com)

INFORMATION (AS AVAILABLE) TO EXAMINE TO SUPPORT DEVELOPMENT OF FINAL  
HONEYWELL LICENSE RENEWAL EA

1. Operational status of Pond D, including date that Pond D stopped receiving process wastewater and the date discharging to NPDES Outfall 002 ended. - **TBD**
2. Uranium soil concentration data for the years 2006-2009 and 2015-2018 for the nearest residence. - **Completed**

**Nearest Resident Data as requested**

<b>Sample Location</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>
NR-7	5.69	5.7	6.04	14.11	17.45	9.15	8.05	7.2

Note: NR -7 is the designation for the Nearest Resident

3. Uranium soil concentration data for the offsite monitoring locations for the years 2006-2009 and 2015-2018. - **Completed**

**Soil Sampling Data as requested**

<b>Sample Location</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>	<i>PPM U</i>
(A) LAMB FARM	0.47	2.36	0.43	3.12	1.15	1.15	1.30	1.02
(B) Brubaker Farm	1.03	5.85	1.07	12.23	1.25	0.92	1.05	0.95
(C) Texaco Station	0.93	2.17	1.97	6.42	1.25	1.15	1.05	1.10
(D) IL Power Equip Station	2.98	1.37	2.09	5.37	1.00	1.59	1.24	0.98
(E) Reiniking Property	0.63	1.34	1.79	5.36	1.15	1.50	1.16	1.00
(F) Metropolis Airport	1.56	0.43	0.96	2.77	2.45	2.10	1.45	1.70
(G) Maple Grove	0.84	2.44	1.38	7.10	0.91	1.30	0.92	1.20
#8 NE Feed Mat'l Bldg.	3.91	12.44	10.75	19.03	24.00	24.50	20.00	24.00
#9 W Feed Mat'l Bldg.	6.70	11.46	8.27	12.41	14.50	15.25	17.50	15.00
#10 S Feed Mat'l Bldg.	2.88	6.58	9.13	7.32	12.50	10.25	10.30	7.50

<b>Sample Location</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
#11 N Feed Mat'l Bldg.	13.52	15.46	19.81	19.47	22.50	11.25	13.50	5.70
#12 E Feed Mat'l Bldg.	13.01	20.94	143.09	91.17	117.00	235.00	109.00	105.50
#13 NE Feed Mat'l Bldg.	48.21	14.12	13.08	8.71	31.00	19.00	40.50	19.50

4. Map identifying monitoring sampling locations 'North of FMB,' 'West of FMB,' 'South of FMB,' 'Northwest of FMB,' 'East of FMB,' and two locations associated with the effluent ditch (700 feet and 1,400 feet). - **Completed**

**Here are the coordinates for the 6-month sampling locations:**

<b>Position</b>	<b>Latitude</b>	<b>Longitude</b>
Brookport Dam	37° 7'35.44"N	88° 39'2.42"W
Brubaker Farm	37° 3'46.45"N	88° 45'51.29"W
Effluent Ditch 1400 feet	37° 9'59.74"N	88° 45'35.02"W
Effluent Ditch 700 feet	37° 10'5.10"N	88° 45'28.71"W
Fall Out 06 - Metropolis Airport	37° 11'4.38"N	88° 44'55.56"W
Fall Out 08 – NE of the FMB	37° 10'24.50"N	88° 45'13.90"W
Fall Out 09 – West of the FMB	37° 10'23.94"N	88° 45'25.96"W
Fall Out 10 – S of the FMB	37° 10'10.42"N	88° 45'30.71"W
Fall Out 11 – N of the FMB	37° 10'28.98"N	88° 45'21.07"W
Fall Out 12 – E of the FMB	37° 10'8.31"N	88° 45'18.35"W
Fall Out 13 – NE of the FMB	37° 10'22.45"N	88° 45'16.11"W
FMB	37° 10'15.69"N	88° 45'21.96"W
Health Physics	37° 10'20.81"N	88° 45'23.09"W
IL POWER EQ ST	37° 11'27.38"N	88° 40'39.03"W
Joppa Boat Ramp	37° 12'3.31"N	88° 50'40.80"W
Lamb Farm	37° 9'22.44"N	88° 50'54.66"W
Lindsay Lake	37° 13'18.67"N	88° 51'7.53"W

Maple Grove	37° 13'42.34"N	88° 51'29.34"W
NR 7 (Nearest Resident)	37° 10'32.87"N	88° 45'13.65"W
Oak Glenn Lake	37° 11'30.90"N	88° 46'23.60"W
Reineking Property	37° 14'34.96"N	88° 42'41.10"W
River Outflow	37° 9'52.76"N	88° 45'45.32"W
Road Effluent Ditch	37° 10'2.52"N	88° 45'24.17"W
Road To Outflow	37° 10'0.32"N	88° 45'36.04"W
Texaco Station	37° 9'14.86"N	88° 37'49.70"W

5. Confirm or correct coordinates for outfalls: - **Completed**

Outfall ID	digLong	digLat	CONFIRM OR CORRECT
002	88.7625 <sup>0</sup> W	37.16444 <sup>0</sup> N	Confirmed
003	88.74389 <sup>0</sup> W	37.1575 <sup>0</sup> N	Corrected
004	88.75417 <sup>0</sup> W	37.16917 <sup>0</sup> N	Corrected
005	88.75806 <sup>0</sup> W	37.17275 <sup>0</sup> N	Corrected

6. GPS coordinates for the effluent ditch sampling points. – **See Above under the answer to #4 - Completed**

7. Existing documentation showing that Honeywell complies with 35 Ill. Adm. Code 901.102. - **TBD**

8. Existing documentation concerning the source and extent of contamination associated with the 2014 soil remediation (526 metric tons) and existing documentation of soils remedial and disposal activities. – **Completed – See the report - Metropolis Works Creosote Area Interim Remedial Measures Implementation Construction Completion Report, Metropolis, Illinois, July 2014 – Uploaded on Daptiv**

9. NPDES permit IL0004421 surface water discharge monitor reports for Outfalls 002, 003, 004 (if available) and 005 for the years 2014-2018. - **TBD**

10. Well monitor reports for wells listed below for the most recent five years of well operation. - **TBD**

<i>Restricted Area along with background, adjacent, and down gradient wells</i>	<i>Old Landfill and Creosoter areas</i>
G101	B2-91
G102	D1-41
G103	G-120
G104	G-121
G105	G-122

<i>Restricted Area along with background, adjacent, and down gradient wells</i>	<i>Old Landfill and Creosoter areas</i>
G106	G-123
G107	G-124
G108	G-125
G109	G-140
G1A1	G-141
G1A3	G-151
G1A4 (GB-04)	G-152
G1A5 (GB-05)	G-153
G1B7 (GB-17)	G-154
GB10	G-155
GB 11	G-156
GB06	G-201
GB07	SU-1122
GB08	SU-1126
GB09	SU-1127
G1B3	SU-1128
G1B8	SU-1129
G1B9	SU-1130
G14D	SU-1142
G14S	SU-1143
G20D	SU-1144
G20S	SU-1145
G12D	SU-1146
G12S	T1-99
G1C1	T2-99
G22S	T3-99
G22D	
G16S	
G16D	
G1B5	
G1B3	
G1B7	
L-301W	
L-302E	
R-104	
R-105	
R-110	
SU-1132	
SU-1133	
SU-1134	
SU-1135	

11. Uranium vegetation concentration data for offsite monitoring locations for the years 2006-2009 and 2015-2018. - **Completed**

#### **Uranium Vegetation Data**

<b>LOCATION</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
	PPM - U	PPM - U	PPM-U	PPM-U
#1 Lamb Farm	d2.21	5.67	3.17	1.96
#2 Brubaker Farm	2.17	2.12	1.12	2.16
#3 Texaco Station	1.52	1.91	1.11	3.11
#4 Illinois Power Equip. Station	1.75	3.31	1.13	7.16
#5 Reiniking Property	0.84	0.80	0.38	15.23
#6 Metropolis Airport	0.41	1.07	.57	4.76
#7 Maple Grove School	1.12	0.78	.37	15.43
#8 NE Feed Mat'l Bldg.	3.27	4.17	1.58	19.32
#9 W Feed Mat'l Bldg.	3.09	1.95	1.94	34.26
#10 S Feed Mat'l Bldg.	0.51	3.04	1.80	7.35
#11 N Feed Mat'l Bldg.	1.24	10.39	1.36	5.99
#12 E Feed Mat'l Bldg.	4.36	9.35	11.56	10.03
#13 NE Feed Mat'l Bldg.	4.27	3.52	2.06	4.48
#14 NR-7	1.98	1.91	1.07	1.91

### PPM U VEGETATION

<b>Location</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
	PPM - U	PPM - U	PPM - U	PPM - U	PPM - U
<b>Lamb Farm</b>	0.15	0.03	0.00	0.00	0.00
<b>Brubaker Farm</b>	0.36	0.02	0.00	0.00	0.00
<b>Texaco Station</b>	0.14	0.00	0.00	0.00	0.00
<b>IL Power Equip. Station</b>	0.10	0.03	0.00	0.00	0.00
<b>Reiniking Property</b>	1.00	0.09	0.06	0.00	0.10
<b>Metropolis Airport</b>	0.54	1.25	0.06	0.16	0.29
<b>Maple Grove School</b>	0.04	0.04	0.00	0.16	0.12
<b>N of FMB</b>	15.40	14.60	19.40	5.30	1.80
<b>W of FMB</b>	5.95	12.75	4.25	2.29	2.75
<b>S of FMB</b>	4.55	30.50	3.25	3.73	2.80
<b>NW of FMB</b>	2.25	1.85	1.50	1.32	0.75
<b>E of FMB</b>	14.75	36.45	20.00	10.15	17.00
<b>N of FMB</b>	7.15	10.30	2.50	4.40	1.60
<b>Nearest Residence</b>	0.83	0.65	1.30	0.09	1.95

**12. Fluoride vegetation concentration data for the offsite locations for the years 2006-2009 and 2015-2018. - Completed**

### Fluoride Vegetation Data

<b>LOCATION</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
	PPM - F	PPM - F	PPM - F	PPM - F
<b>Lamb Farm</b>	54.96	66.65	19.25	54.47
<b>Brubaker Farm</b>	57.74	61.43	16.48	52.76

LOCATION	2006	2007	2008	2009
Texaco Station	56.03	49.64	18.00	51.06
IL Power Equip. Station	51.37	56.16	17.96	49.44
Reiniking Property	49.21	46.94	18.06	45.85
Metropolis Airport	47.24	49.09	18.32	45.66
Maple Grove School	51.26	48.17	19.02	46.52
N of FMB	54.01	53.00	37.45	45.84
W of FMB	53.08	49.88	44.87	46.89
S of FMB	53.96	45.16	25.09	61.24
NW of FMB	56.40	44.77	35.65	48.64
E of FMB	60.52	42.23	29.41	48.46
N of FMB	65.15	47.33	41.53	46.40
Nearest Residence	56.97	44.24	30.12	47.29

LOCATION	2015	2016	2017	2018
	PPM - F	PPM - F	PPM - F	PPM - F
Lamb Farm	1822.50	11.50	31.40	60.00
Brubaker Farm	1005.00	24.50	13.05	14.00
Texaco Station	1728.50	37.00	107.50	134.00
IL Power Equip. Station	2250.00	4.50	16.70	190.00
Reiniking Property	ND	6.00	9.00	90.00
Metropolis Airport	1300.00	10.00	10.55	5.50
Maple Grove School	600.00	7.05	18.90	14.40
N of FMB	3.15	56.50	6.90	60.00
W of FMB	ND	ND	18.00	23.95
S of FMB	160.00	2.50	7.75	122.15
NW of FMB	2.10	2.55	4.30	1.15
E of FMB	3.60	2.50	3.75	21.00
N of FMB	2.00	5.45	17.35	155.95
Nearest Residence	172.60	22.50	159.00	80.55