

Buser, David - DNR

From: Lourigan, Joseph J - DNR
Sent: Friday, February 23, 2024 9:57 AM
To: Buser, David - DNR; Specketer, Luke
Cc: Torresani, Mark; Dan Otzelberger; Tim Curry
Subject: RE: EPL Western Exp - Review Status & Request for Add'l Info
Attachments: EPL Sulfate in Leachate.xlsx

Luke,

The preliminary explanations for the cause of the exceedances are provided in the routine groundwater data submittals to the department. The provided explanation for the chloride is a likelihood of road salt runoff along Union Church Drive, since these wells are located within close proximity to the road. The provided explanation for the sulfate is from naturally occurring sulfur containing minerals in the aquifer that may release sulfate when the sulfur is oxidized or dissolution of the minerals occur. In addition to that, I took a look at the reported sulfate concentration in the EPL leachate (attached worksheet). The reported sulfate concentrations in leachate do not appear to support the waste in the landfill as a source for the sulfate exceedances.

Unless GFL disagrees, the department understands these are the explanations for the cause of the exceedances, based on the current information GFL and the department have.

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Joe Lourigan

(He/Him/His)

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From: Buser, David - DNR <David.Buser@wisconsin.gov>
Sent: Friday, February 23, 2024 9:24 AM
To: Specketer, Luke <Luke.Specketer@tetrattech.com>
Cc: Torresani, Mark <Mark.Torresani@tetrattech.com>; Dan Otzelberger <daniel.otzelberger@gflenv.com>; Tim Curry <tim.curry@gflenv.com>; Lourigan, Joseph J - DNR <Joseph.Lourigan@wisconsin.gov>
Subject: EPL Western Exp - Review Status & Request for Add'l Info

Hi Luke,

It appears some of the NR 140 issues/questions got addressed, some may be imminently (e.g., collection of 8th sample w/ acceptable QC). So, that's good. We also understand that all exemption requests from the 2016 plan mod remain in effect here, where applicable. If not, please let me know.

Obviously, this has been an extended siting process, with its long interlude (if not wonky, it was atypical or unfamiliar at least. As a consequence, many of the GW data used in calculations and representing site conditions were quite old. As existing monitoring points, more recent data are available. In some cases, we felt it appropriate to expand our review and bring more current, using a 3-year retrospective (six GWM rounds since 2021) for comparison to the subsets of older data. During this exercise, **it appears we identified some GW quality exceedances for which NR 140 exemptions had not been requested, and which are associated with the proposed expansion (Phase 8):**

- Chloride - at MW303A (>ES)
- Chloride – at MW305A (>PAL<ES)
- Sulfate – MW303C (>ES)

At your earliest convenience, could you or authorized other confirm that you'd like to request exemptions for these? An email saying "yes" is fine. [Please note: We only clawed back 3 years in our expanded review. Just a fyi...]

We're in the process of completing an internal memo to DG program for concurrence. Also, preparing for the diverse scope of public notifications.

Please call me if you have any questions or need to discuss anything prior to our meeting March 11th .

Thank you,

David

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David M. Buser, P.G. (WA)

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Total Rows: 92

Facility Name	Lic#	Point ID	Dup Samp No	Point Name	Point Type Description	Parm Code	Parameter Description	Sample Date	Result Value	Result Unit	Rslt Qual Code	Point Status	QC1	QC2	QC3
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/16/2023	161	mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/18/2023	0	mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/12/2023	223	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/17/2022	0	mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/12/2022	0	mg/L	N	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/18/2022	93.3 mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/28/2022	508 mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/21/2021	49.6 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/19/2021	460 mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/18/2021	275 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/19/2020	107 mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/16/2020	28.4 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/08/2020	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/29/2020	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/14/2019	130 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/25/2019	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/11/2019	711 mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/16/2019	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/19/2018	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/25/2018	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/20/2018	257 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/30/2018	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/19/2017	0 mg/L	N	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/19/2017	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/30/2017	228 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/25/2016	21.5 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/18/2016	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/21/2016	218 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/25/2016	0 mg/L	N	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/13/2015	47.6	mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/01/2015	0	mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/29/2014	73.7	mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/08/2014	31.4	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/23/2014	13.5	mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/14/2014	572	mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/16/2013	211 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/10/2013	390 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/11/2013	473 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/17/2013	87.6 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/08/2012	28.9 mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/12/2012	0 mg/L	N	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/19/2012	69.6 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/03/2012	7.59 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/18/2011	0 mg/L	N	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/05/2011	39.7 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/25/2011	97.4 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/20/2011	2.87 mg/L	J	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/13/2010	188 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/28/2010	155 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/29/2010	61 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/19/2010	61.2 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/19/2009	283 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/14/2009	80 mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/23/2009	129	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/20/2009	8.64	mg/L	J	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/14/2008	916	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/01/2008	176	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/16/2008	941	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/10/2008	472	mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/18/2007	116 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/12/2007	141 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	05/30/2007	42.1 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/24/2007	103 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/30/2007	64.2 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/12/2006	30.5 mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/13/2006	42.6	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/26/2006	77.1	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/26/2006	324	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/13/2005	463	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/13/2005	320	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	01/24/2005	155	mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/21/2004	19.9	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	07/22/2004	160	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/13/2004	171	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/20/2003	47.2	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/10/2003	240	mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/08/2002	303	mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/11/2002	363 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/15/2001	130 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/12/2001	105 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/12/2000	29.9 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/17/2000	33 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/14/1999	350 mg/L	D	A	M	M	M

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/14/1999	130 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/28/1998	73 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/14/1998	17 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/09/1997	91 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/21/1997	52 mg/L	D	A	M	M	M
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/21/1996	110 mg/L	D	A			

EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/11/1996	0 mg/L	N	A			
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	10/20/1995	23 mg/L	D	A			
EMERALD PARK LANDFILL LLC	3290	400	01	LIFT STATION	Leachate Collection Sys	945	SULFATE, TOTAL (MG/L SO4)	04/01/1995	69 mg/L	D	A			

LOD	LOQ	RL	Analysis Method Code	Report Period Date	Lab Anal. Date	Sample ID	Lab ID	Pt Key
44.4	200	200.00	EPA 300.0	10/01/2023	10/28/2023	269642001	405132750	14529
222	1000	1000.00	EPA 300.0	04/01/2023	05/02/2023	260939001	405132750	14529
44.4	200	200.00	EPA 300.0	01/01/2023	01/17/2023	257054001	405132750	14529
44.4	200	200.00	EPA 300.0	10/01/2022	10/25/2022	253240001	405132750	14529
222	1000	1000.00	EPA 300.0	07/01/2022	07/15/2022	247977001	405132750	14529

44.4	200	200.00	EPA 300.0	04/01/2022	04/26/2022	243575001	405132750	14529
222	1000	1000.00	EPA 300.0	01/01/2022	02/02/2022	240008001	405132750	14529
4.4	20	20.00	EPA 300.0	07/01/2021	07/22/2021	230412001	405132750	14529
222	1000	1000.00	EPA 300.0	04/01/2021	05/03/2021	225391001	405132750	14529
44.4	200	200.00	EPA 300.0	01/01/2021	01/20/2021	221158001	405132750	14529
22.2	100	100.00	EPA 300.0	10/01/2020	11/02/2020	216826001	405132750	14529

4.4	20	20.00	EPA 300.0	07/01/2020	07/27/2020	211301001	405132750	14529
8.9	40	40.00	EPA 300.0	04/01/2020	04/16/2020	205981001	405132750	14529
44.4	200	200.00	EPA 300.0	01/01/2020	02/05/2020	202635001	405132750	14529
20	60	60.00	EPA 300.0	10/01/2019	10/23/2019	197242001	405132750	14529
20	60	60.00	EPA 300.0	07/01/2019	07/26/2019	191905001	405132750	14529
20	60	60.00	EPA 300.0	04/01/2019	04/25/2019	185731001	405132750	14529

100	300	300.00	EPA 300.0	01/01/2019	01/21/2019	182138001	405132750	14529
100	300	300.00	EPA 300.0	10/01/2018	10/29/2018	178094001	405132750	14529
100	300	300.00	EPA 300.0	07/01/2018	07/30/2018	173066001	405132750	14529
20	60	60.00	EPA 300.0	04/01/2018	05/01/2018	167816001	405132750	14529
100	300	300.00	EPA 300.0	01/01/2018	01/31/2018	164120001	405132750	14529
500	1500	1500.00	EPA 300.0	10/01/2017	11/03/2017	159051001	405132750	14529

20	60	60.00	EPA 300.0	07/01/2017	07/28/2017	153562001	405132750	14529
20	60	60.00	EPA 300.0	01/01/2017	02/07/2017	145025001	405132750	14529
0.81	2.7	2.70	EPA 300.0	10/01/2016	11/17/2016	140794001	999407970	14529
40	80	80.00	EPA 300.0	07/01/2016	07/25/2016	135476001	405132750	14529
40	80	80.00	EPA 300.0	04/01/2016	05/04/2016	131192001	405132750	14529
200	400	400.00	EPA 300.0	01/01/2016	02/08/2016	127534001	405132750	14529

40	80	80.00	EPA 300.0	07/01/2015	07/20/2015	118041001	405132750	14529
100	200	200.00	EPA 300.0	04/01/2015	04/10/2015	112539001	405132750	14529
40	80	80.00	EPA 300.0	10/01/2014	11/12/2014	106164001	405132750	14529
10	20	20.00	EPA 300.0	07/01/2014	07/17/2014	99367016	405132750	14529
10	20	20.00	EPA 300.0	04/01/2014	04/25/2014	95204001	405132750	14529
100	200	200.00	EPA 300.0	01/01/2014	01/21/2014	91013001	405132750	14529

40	80	80.00	EPA 300.0	10/01/2013	10/22/2013	86836032	405132750	14529
20	40	40.00	EPA 300.0	07/01/2013	07/19/2013	80917016	405132750	14529
40	80	80.00	EPA 300.0	04/01/2013	04/17/2013	76256017	405132750	14529
20	40	40.00	EPA 300.0	01/01/2013	01/22/2013	73045001	405132750	14529
20	40	40.00	EPA 300.0	10/01/2012	10/16/2012	406852600	405132750	14529
100	200	200.00	EPA 300.0	07/01/2012	07/20/2012	406333400	405132750	14529

2	6.66	0.00	9056 - TOTA	04/01/2012	04/23/2012	120428512	737053130	14529
1	3.33	0.00	9056 - TOTA	01/01/2012	01/05/2012	120101401	737053130	14529
1	3.33	0.00	9056 - TOTA	10/01/2011	10/21/2011	111025801	737053130	14529
1	3.33	0.00	9056 - TOTA	07/01/2011	07/07/2011	110705306	737053130	14529
20	66.6	0.00	9056 - TOTA	04/01/2011	04/26/2011	110436706	737053130	14529
1	3.33	0.00	9056 - TOTA	01/01/2011	01/21/2011	110123402	737053130	14529

20	66.6	0.00	9056 - TOTA	10/01/2010	10/14/2010	101023101	737053130	14529
20	66.6	0.00	9056 - TOTA	07/01/2010	07/29/2010	100745506	737053130	14529
2	6.66	0.00	9056 - TOTA	04/01/2010	05/03/2010	100452505	737053130	14529
2	6.66	0.00	9056 - TOTA	01/01/2010	01/20/2010	100120401	737053130	14529
20	66.6	0.00	9056 - TOTA	10/01/2009	10/20/2009	091032409	737053130	14529
20	66.6	0.00	9056 - TOTA	07/01/2009	07/15/2009	090721701	737053130	14529

10	33.3	0.00	9056 - TOTA	04/01/2009	04/28/2009	090446225	737053130	14529
4	13.3	0.00	9056 - TOTA	01/01/2009	01/22/2009	090124001	737053130	14529
10	33.3	0.00	9056 - TOTA	10/01/2008	10/16/2008	081022701	737053130	14529
10	33.3	0.00	9056 - TOTA	07/01/2008	07/03/2008	080703201	737053130	14529
100	333	0.00	9056 - TOTA	04/01/2008	04/17/2008	080429401	737053130	14529
10	33.3	0.00	9056 - TOTA	01/01/2008	01/11/2008	080112701	737053130	14529

4	13.3	0.00	9056 - TOTA	10/01/2007	10/24/2007	071032906	737053130	14529
2	6.66	0.00	9056 - TOTA	07/01/2007	07/16/2007	070714302	737053130	14529
1	3.33	0.00	9056 - TOTA	05/01/2007	06/04/2007	070550906	737053130	14529
5	16.6	0.00	9056 - TOTA	04/01/2007	04/25/2007	070435701	737053130	14529
1	3.33	0.00	9056 - TOTA	01/01/2007	02/02/2007	070136801	737053130	14529
5	16.6	0.00	9056 - TOTA	10/01/2006	10/14/2006	061023105	737053130	14529

5	16.6	0.00	9056 - TOTA	07/01/2006	07/14/2006	060711501	737053130	14529
2	6.66	0.00	300	04/01/2006	04/28/2006	199410	737053130	14529
10	33.3	0.00	300	01/01/2006	01/30/2006	194303	737053130	14529
10	33.3	0.00	300	10/01/2005	10/17/2005	188054	737053130	14529
10	33.3	0.00	300	04/01/2005	04/19/2005	174613	737053130	14529
2	6.66	0.00	300	01/01/2005	01/26/2005	170115	737053130	14529

2	6.66	0.00	300	10/01/2004	10/26/2004	165312	737053130	14529
2	6.66	0.00	300	07/01/2004	07/26/2004	159326	737053130	14529
5	16.7	0.00	300	04/01/2004	04/19/2004	152377	737053130	14529
5	17	0.00	300	10/01/2003	11/18/2003	142314	737053130	14529
1	3.33	10.00	300	04/01/2003	04/14/2003	127901	737053130	14529
1	3.33	10.00	300	10/01/2002	10/14/2002	113971	737053130	14529

1	3.33	10.00	300	04/01/2002	04/16/2002	97752	737053130	14529
1.5	5	25.00	300	10/01/2001	10/23/2001	84124	737053130	14529
5	17	10.00	300	04/01/2001	04/20/2001	67905	737053130	14529
5	17	5.00	300	10/01/2000	10/18/2000	53061	737053130	14529
25	25	0.00	9036	04/01/2000	04/26/2000	228228	721026460	14529
50	50	0.00	9036	10/01/1999	10/20/1999	215231	721026460	14529

50	50	0.00	9036	04/01/1999	04/29/1999	197789	721026460	14529
10	10	0.00	9036	10/01/1998	11/11/1998	183759	721026460	14529
5	5	0.00	9036			165289	721026460	14529
50	50	0.00	9036			150764	721026460	14529
12	12	0.00	9036			134418	721026460	14529
0	0	0.00	NOT REPORTED				0	14529

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0	0	0.00	NOT REPORTED					0	14529