August 30, 2023

Ms. Cindy Wheeler
U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics
Existing Chemicals Risk Management Division
1200 Pennsylvania Ave. NW M
Washington, DC 20460

Re: Request for Comment on 1,4-Dioxane, Draft Supplement to the TSCA Risk Evaluation, Document ID EPA-HQ-OPPT-2022-0905

Dear Ms. Wheeler:

We appreciate this opportunity to provide EPA with occupational exposure data for our PET manufacturing operations. We are attaching a summary of this data.

DAK Americas/Alpek Polyester is a major supplier of PET resin that is used in producing PET bottles and film. As you know, 1,4 Dioxane is generated in the PET process and is a chemical that we have monitored routinely.

Please note that the data supplied spans many years and several different locations. Variability in available testing methods should be expected. This data was used to compare to the PEL at the time of sampling. The current PEL is 100 ppm and this shows that DAK/Alpek Polyester is well within this limit.

DAK/Alpek Polyester's main concern with the proposed EPA exposure limit is the ability to analyze down to that limit. It may not be possible in all areas.

We would be happy to meet with EPA to discuss this data.

Sincerely yours,

Penny C. Mahoney

Penny Mahoney
Senior Director of Global Sustainability

Summary of DAK Americas 1,4 Dioxane
Personnel Exposure Data

Columbia Site(Gaston, SC) Data:

Date	Task/Activity Performed	Duration (Mins)	Result (ppm)
1/21/03	Collecting process samples in Polymer 1* building	20	< 6.03
1/22/03	Collecting process samples in Polymer 1* building	15	< 8.01
1/28/03	Collecting process samples in Polymer 1* building	27	< 4.48
7/8/98	While operators obtain process samples	22	< 0.350
7/8/98	While operators obtain process samples	33	< 0.234
7/8/98	While operators obtain process samples	20	< 0.419
5/11/01	While operators obtain process samples	15	< 1.838
5/11/01	While operators obtain process samples	15	< 1.809
5/12/01	While operators obtain process samples	15	< 1.865
5/3/07	L1&L2 Stripper, L1&L2 MY33, 1-6 Crystallizer, L1&L2 paste, L1&L2 water column, C01, C02, E01, L1&L2 seal pot, L1&L2 water column	671	< 1.2
5/3/07	Cleaned immersion vessels 1st floor, opened PTA feeder 2nd floor restart cutter 3rd floor, swapped L2 paste pump & flushed with EG, put heads on L2 heat exchanger	675	< 1.4
5/22/08	Inspecting sprays at immersion vessels (pre-polymer & final polymer) and clean and swap baskets - total of (4) baskets of waste dumped into waste buggy	34	< 1.3
6/5/08	Inspecting sprays at immersion vessels (pre-polymer & final polymer) and clean and swap baskets - total of (4) baskets of waste dumped into waste buggy	25	< 1.8
7/24/08	Inspecting sprays at immersion vessels (L2 pre-polymer & final polymer - Line 1 upset)	52	2.7

* Polymer 1 operation has since been shut down. This was a DMT based Resins operation.

Analytical Method Used for 1998 Samples = ECHR-A-IH58-GC-89-2
Sample Media for 1998 Samples = Charcoal Tube
Eastman Chemical Company IH Analytical Laboratory Level of Quantitation = 6 ug

Analytical Method Used for 2001 Samples = NIOSH 1602
Sample Media for 2001 Samples = SKC Sorbent Tube 226-01
Schneider Laboratories Report Limit = 20 ug

Analytical Method Used for 2003 Samples = NIOSH 1602
Sample Media for 2003 Samples = 3M POVM-3500 Passive Dosimeter
Analytics Corporation LOQ = 15ug

Analytical Method Used for 2007 and 2008 Samples = GC/FID-OSHA 07
Sample Media for 2007 and 2008 Samples = SKC Sorbent Tube 226-09
2007 – Travelers IH Lab LOQ = 31ug
2008 – Travelers IH Lab Method Reporting Limits (MRLs) = 32ug

Cedar Creek Site (Fayetteville, NC) Data:

Date	Task/Activity Performed	Duration (Mins)	Result (ppm)
12/9/05	Changing pot filters – Pot filters – Finisher	48	< 0.062
12/9/05	Changing pot filters – Pot filters – Finisher	43	< 0.074
12/9/05	Changing pot filters – Pot filters – Finisher	43	< 0.067
12/9/05	Changing pot filters – Pot filters – Up Flow	46	< 0.07
12/9/05	Changing pot filters – Pot filters – Up Flow	43	< 0.073
12/9/05	Changing pot filters – Pot filters – Up Flow	42	< 0.072
4/13/05	Cleaning/raking finisher hot well	37	< 0.2
4/14/05	Cleaning/raking finisher hot well	28	< 0.2
4/15/05	Cleaning/raking finisher hot well	32	< 0.2
4/18/05	Cleaning/raking finisher hot well	25	< 0.2
4/28/05	Cleaning/raking finisher hot well	30	< 0.2
4/29/05	Cleaning/raking finisher hot well	28	< 0.2
9/28/22	Cleaned dryer screens; pulled finisher hot well screens twice and sprayed down; drainer recirc. Pump for the finisher hot well twice; pulled 1 o'clock liquid samples; took band filter paper out, etc.…	681	< 0.2
9/29/22	Worked around finisher hot well; pulled samples; pulled water sample on band filter; pulled up flow heat exchanger sample (glycol is in this system); worked on recrystallizer to free up clumps (some AA possible); rodded mix tank chute, etc..	658	< 0.2
9/28/22	Hot well screen raking, pot filter finisher & up flow filter cleaning, collection of liquid samples, cleaned out mix tank chute 4-5 times, valved out Nash pump, assisted w/pot filter (finisher) swap over, took out band filter paper, around hot wells cleaning up waste around them, etc...	675	< 0.2
9/29/22	Performed pot filter work and hot well inspections and raking, collected liquid samples (4 total), in admin bldg. for a bit, outside, walkthrough laser bldg., helped w/crystallizer beds, walked up to silos, collected chip samples, swept up chip, looked at chippers	618	< 0.2
9/28/22	Hot well raking and pot filter (finisher and up flow) cleaning	68	< 0.3
9/29/22	Hot well raking and pot filter (finisher and up flow) cleaning	86	< 0.3
9/28/22	Process sample collection (collected 4 liquid samples) - hot wells, CP recycle sample, water sample on reflux system	20	< 1
9/29/22	Process sample collection (collected 4 liquid samples) - hot wells, CP recycle sample, water sample on reflux system	19	< 1

Analytical Method Used for 2005 Samples = Modified NIOSH 1602; GC/FID
Sample Media for 2005 Samples = SKC Sorbent Tube 226-01
Galson Laboratories Level of Quantitation = 3 ug

Analytical Method Used for 2022 Samples = Modified NIOSH 1602; GC/FID Badge
Sample Media for 2022 Samples = Assay Technology Passive Dosimeter Badges - N566 (600+ minute samples) and N525 (<90minute samples)
Galson Laboratories Level of Quantitation = 5 ug

Cooper River Site (Moncks Corner ,SC) Data:**

Date	Task/Activity Performed	Duration (Mins)	Result (ppm)
5/23/06	CP 4th Floor Patrol	390	< 0.091
5/24/06	CP 4th Floor Patrol	420	< 0.084
5/25/06	CP Field Patrol 4th Floor	405	< 0.087
5/31/06	CP Field Patrol 4th Floor	405	< 0.087
6/1/06	CP Field Patrol 4th Floor	405	< 0.087
6/6/06	CP Field Patrol	405	< 0.087
2/26/13	Routine Patrols	555	< 0.08
2/26/13	Resin CP	560	< 0.08
7/9/13	Resin CP - Hot wells, Patrols, Filter Change - Post Finisher	600	< 0.07
7/9/13	Staple CP - Routine Patrols	600	< 0.07
7/10/13	Routine Patrols	580	< 0.07
7/10/13	Routine Patrols	580	< 0.07

** Site production operations closed down permanently on 3/1/23.

Analytical Method Used for All Samples = Modified NIOSH 1602; GC/FID
Sample Media = 3M 3500 Badge - Passive Sampler
Galson Laboratories Level of Quantitation = 4 ug (2006 samples); 5 ug (2013 samples)

Pearl River Site (Bay St. Louis, MS) Data:

Date	Task/Activity Performed	Duration (Mins)	Result (ppm)
1/31/23	Completed routine operations in L-1: cleaned PP1, PP2, and DRR glycol immersion vessels, locked out cutter, preventative maintenance in L building, assisted moving chemicals to 4th floor, unlocked pressure test on Hx 65, locked out HTM pump 08, unlocked red toner pump on H-2, *pump stopped	520	< 0.033
1/31/23	Completed routine operations in H-2: cleaned PP1, PP2, and DRR glycol immersion vessels (samples 07 and 08), went offsite for physical- approx. 3 1/2 hrs, unlocked heat exchanger 39 and filled w/glycol in H-2, locked out cutter, PM in L-building, locked out HTM pump0 08B (was leaking HTM) in H-2, unlocked HX55 for 24hr pressure test	636	< 0.218
1/31/23	Cleaned H-1 PP1 Glycol Immersion Vessel: turned vent/fan on, opened vessel, removed/placed half screen/cleaned basket, rinsed w/water hose *typically closes vessel after task (took approx. 5 mins), but left open for sample purposes *task done every 12 hours	30	< 0.463
1/31/23	Cleaned H-1 PP2 Glycol Immersion Vessel: turned vent/fan on, opened vessel, removed/placed half screen/cleaned basket, rinsed w/water hose *typically closes vessel after task (took approx. 5 mins), but left open for sample purposes *task done every 12 hours	30	< 0.441
1/31/23	Cleaned H-2 PP1 Glycol Immersion Vessel: turned fan on, opened vessel, removed/placed screen w/pulley, cleaned basket, rinsed w/water hose. Took approx. 5 min *internal vent left off during sample by accident *task done every 12 hours	30	< 0.463
1/31/23	Cleaned H-2 PP2 Glycol Immersion Vessel: turned fan on, opened vessel, removed/placed screen w/pulley, cleaned basket, rinsed w/water hose. Took approx. 5 min *internal vent left off during sample by accident	30	< 0.463
2/7/23	Completed routine operations in H-2: cleaned PP1, PP2, and DRR Glycol Immersion Vessels (sample 06); collected/ran samples of PP1 and DRR and composite samples, 6073 ring main samples, pressure test/LOTO heat exchangers, locked out cutters, cleaned 25 column bottom pump, housekeeping	673	< 0.206
2/7/23	Cleaned L Building PP1 glycol immersion vessel: Turned vent/fan on, opened vessel, removed/placed screen w/mechanic pulley, cleaned basket w/scraper/hand tools and rinsed w/water hose. *Typically closes vessel after task (15 mins) but left open for sample purposes. task completed every 12 hours	30	< 0.463
2/7/23	Cleaned L Building PP2 glycol immersion vessel: Turned vent/fan on, opened vessel, removed/placed screen w/mechanic pulley, cleaned basket w/scraper/hand tools and rinsed w/water hose. *Typically closes vessel after task (15 mins) but left open for sample purposes, task completed every 12 hours	30	< 0.463
2/7/23	Cleaned H-2 DRR glycol immersion vessel: Turned vent/fan on, opened vessel, removed/placed screen w/mechanic pulley, cleaned basket w/scraper/hand tools and rinsed w/water hose. *Typically closes vessel after task (15 mins) but left open for sample purposes. task completed every 12 hours	35	< 0.387
2/7/23	Cleaned H-1 DRR glycol immersion vessel, opened vessel, removed/placed screen w/mechanic pulley, cleaned basket w/scraper/hand tools and rinsed w/water hose. *typically closes vessel after task (15 mins) but left open for sample purposes. task completed every 12 hours	36	< 0.376
2/7/23	Completed routine operations in L building: clean PP1, PP2, and DRR (samples 04 and 05); collected/ran sample in L building, collected composite samples in L building, unlocked 59 pump, housekeeping, unlocked HDM pump, locked/brought up cutters, swapped/brought up compressors and fans, collected field readings	562	< 0.247

Analytical Method Used for All Samples = NIOSH Method 1602M
Sample Media = SKC 226-01 Sorbent Sample Tube
Technical Environmental Services (TEC) Inc. Reporting Limit = 10 ug

Montreal Site (Montreal, QC Canada) Data:

Date	Task/Activity Performed	Duration (Mins)	Result (ppm)
2/9/18	Final Polymer Immersion Vessel - Operator cleaning vessel	40	< 0.2
2/23/18	Cleaning PP2 and Final Polymer Immersion Vessels	70	< 0.1
3/2/18	Cleaning PP1 and PP2 Immersion Vessels	70	0.30
3/9/18	Cleaning PP2 and Final Immersion Vessels	92	< 0.08
3/30/18	Cleaning PP1 , PP2, and Final Immersion Vessels	70	< 0.1

Analytical Method Used for All Samples = Modified NIOSH 1602; GC/FID
Sample Media = SKC 226-01 Sorbent Sample Tube
Galson Laboratories Level of Quantitation = 5 ug