

ESC - Neot Hovav. 9 Stacks Test Results. 16-17/11/2014.

Series	Average Stack Gas Temp	Stack Gas Water Content	Average Stack Gas Flowrate (St-d Cond-s, 0 oC)	Sampling Time	Hazard Sampled	Hazard Instack Conc-n (St-d Cond-s, 0 oC)	Hazard Instack Conc-n (St-d Cond-s, 0 oC) Norm. to 3% O2)	Hazard Emission Rate	Remarks	
No.	o C	% vol	dscm/Hr	HH:mm		mg/dscm	mg/dscm	Kg/Hour		
Neutralizing Facility										
Stack 01 Main Scrubber Stack	18.1	1.5	5,775	11:15-12:05	HCL, NH3, H2S, NOx, TOC					
					HCL	0.57	-----	0.0033		
				NH3	1.22	-----	0.0071			
					10:15-11:15	NOx	17.7	-----	0.1023	< LOD
					11:17-11:47	H2S	0.18	-----	0.0010	
					10:26-10:55	TOC as Carbon	8.74	-----	0.0506	
						HCN				
	19.0	1.5	5,792	10:01-10:51	HCN	0.022	-----	0.00013		
"Yatzuv Mitzuk" Facility.										
Stack 02 East Mixer Stack	25.8	1.1	3,455	11:22-12:00	Total Dust	1.59	-----	0.0055		
					NH3	42.5	-----	0.1467		
					11:27-11:57	TOC as Carbon	11.87	-----	0.0410	
					11:24-11:53	H2S	0.075	-----	0.00026	< LOD

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No.	o C	% vol	dscm/Hr	HH:mm		mg/dscm	mg/dscm	Kg/Hour	
Stack 03 West Mixer Stack	25.8	1.4	3,365	10:22-11:00	Total Dust	1.13	-----	0.0038	
					NH3	43.7	-----	0.1470	
				11:27-11:57	TOC as Carbon	11.53	-----	0.0388	
				10:26-10:55	H2S	0.095	-----	0.00032	
Stack 04 Main System Stack	21.4	1.6	47,033	12:50-13:41	Total Dust	0.70	-----	0.0330	
					NH3	0.89	-----	0.0420	
				13:00-13:30	H2S	0.072	-----	0.0034	< LOD
				12:55-13:24	TOC as Carbon	7.43	-----	0.3496	
Organo-Acid Facility.									
Stack 06 Charcoal System Stack	24.3	1.9	1,859	12:29-13:50	HCL, H2S, TOC				
					HCL	0.47	-----	0.00087	< LOD
				12:00-12:30	H2S	0.074	-----	0.00014	< LOD
	12:44-13:13	TOC as Carbon	43.78	-----	0.0814				
	23.4	1.9	1,830	11:40-12:14	H2SO4				
				H2SO4	0.26	-----	0.00047	< LOD	

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No.	o C	% vol	dscm/Hr	HH:mm		mg/dscm	mg/dscm	Kg/Hour					
Stack 07 Steam Boiler Stack	143.1	6.7	1,838	09:01-09:34	Total Dust	63.3	81.8	0.1164					
					SO2	1,083	1,399	1.990					
								09:03-09:33	NOx	406.8	525.5	0.7476	
								CO	2.7	3.5	0.0049		
								CO2	10.54	-----	380.6		
								O2 (Measured)	7.04	-----	-----		
								O2 (for Norm-n)	3.0	-----	-----		
Stack 08 RTO System Stack	210.3	6.3	2,209	10:28-11:01	Total Dust	1.49	-----	0.0033					
					NH3	0.18	-----	0.00039					
								10:30-11:00	NOx	74.5	-----	0.1645	
								10:30-11:00	TOC as Carbon	5.20	-----	0.0115	
									CO	8.8	-----	0.0193	

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No.	o C	% vol	dscm/Hr	HH:mm		mg/dscm	mg/dscm	Kg/Hour	
Other Facilities.									
Stack 09 Shed-1 Stack	21.8	1.3	12,978	13:45-14:18	Total Dust	0.52	-----	0.0068	
				14:47-14:16	TOC as Carbon	3.41	-----	0.0442	
Stack 10 Barrels Crusher Stack	30.0	1.4	532	14:37-15:06	TOC as Carbon	1.39	-----	0.00074	

- Remarks:**
- The Concentrations were Calculated at Standard Conditions (Dry Gas, 0 oC, Atmospheric Pressure).
Boiler Concentrations (Stack 07) were Normalysed to 3% O2.
TOC Concentrations were Calculates as Carbon.
Cyanides Concentrations were Calculates as HCN.
 - "< LOD" = less than the Limit of Determination.
"N.D" = Not Detectable, less than the Limit of Determination.