

ENVIRONMENTAL INCIDENTS 2016

Date	Incident level	Operation/site	Description	Remedial action taken	Current status
Gold Division					
25 January	3	Cooke	Water overflowed from the plant's surge ponds into the coffer dams, beyond the plant perimeter and into the Wonderfonteinspruit, causing overtopping of the thickeners and surge ponds.	The incident was reported to the DWS, and an additional pump was installed to increase the flow rate of water pumped back from the surge ponds. A programme was put in place to desilt the surge ponds and thus increase capacity.	Completed
22 March	3	Ezulwini	Consecutive dust exceedances recorded in February 2016.	No remedial action necessary. Both sampling positions are adjacent to farmland and affected by the movement of farming machinery. This was further exacerbated by dry ambient conditions and unseasonal winds	Completed
6 October	3	Cooke	Two consecutive non-residential dust exceedances were recorded at the plant airlock sampling position in July and August 2016.	Action taken in mitigation included: <ul style="list-style-type: none"> Maintaining regular water spraying where trucks are loaded and unloaded, especially during windy times 	In progress
1 November	3	Cooke	Two consecutive non-residential dust exceedances were recorded at the plant airlock sampling position in August and September 2016.	<ul style="list-style-type: none"> Installing water sprayers on front-end loaders with the necessary pressure, height and coverage around sand dunes to keep them moist. The operator can then turn the water sprays on and off as needed, starting from inside the plant Set up water sprays around dunes and apply water suppressant at offloading points <p>Other options being considered are a return to the old system of reclamation, the installation of new sprays around dunes and applying water suppressants at affecting points</p>	In progress
22 November	3	Driefontein	A spill recurred from the return water dam at a tailings storage facility into the canal flowing towards the Wonderfonteinspruit.	The Department of Water and Sanitation was notified, and a second return pump was installed and commissioned. To maximise return water use, all other top-up sources to the plants, such as mine water, were reduced.	Completed
14 December	3	Driefontein	A spill recurred from the return water dam at a tailings storage facility into the canal leading towards the Wonderfonteinspruit, following lightning damage to a power cable.	The DWS was notified and the damaged cable was repaired. The use of return water was maximised by reducing all other top-up sources, such as mine water, to the plants.	Completed

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Platinum Division					
16 April 2016	4	Kroondal	Dust monitoring locality KPM SB 03 (Haul Road), KPM SB 04 (Klipfontein) exceeded the SANS non-residential limit of 1,200 mg/m ² /day.	To suppress dust, tankers with spray systems being used twice daily on haul roads and use of sprinklers on tailings facilities increased	In progress
29 April 2016	3	Kroondal	Total coliform count of 4,000CFU/100ml and E. coli count of 440CFU/100ml	Changes are being made to the design of existing sewage plants	In progress
29 April 2016	3	Kroondal	The pump at the raw sewer pump station at Bambanani shaft broke, resulting in raw sewerage overflowing into the pollution control dam	New cutter pump was installed in the raw sewage sump	Completed
16 May 2016	3	Kroondal	Overflow	To maintain water balance levels at the K150 dam, water was pumped from here and to the K1 return water dam. Furthermore, as the K1 tailings facility is nearing the end of its life and its usage has been reduced, levels at the K1 return water dam remain low.	Completed
4 June 2016	4	Kroondal	Overflow at the K1 pond due to inadequate monitoring of water levels at return water dams on tailings facilities	A specialist service provider was contracted to assist in managing water pumped from the various return water dams	Completed
1 June 2016	4	Kroondal	KPM SB01 (mine main road) - 2,510mg/m ² /day and KPM SB06 (K2 Tailings dam) - 1,540mg/m ² /day triggering the action threshold		Open
1 July 2016	4	Kroondal	KPM SB01 (mine main road) - 2,670mg/m ² /day and KPM SB05 (K150 Tailings dam) - 1,630mg/m ² /day	To suppress dust, tankers with spray systems being used twice daily on haul roads and use of sprinklers on tailings facilities increased	In progress
1 August 2016	4	Kroondal	KPM SB01 (mine main road) - 1,390mg/m ² /day; KPM SB05 (K150 Tailings dam) - 1,950mg/m ² /day; KPM SB11 (Klipfontein2) - 813mg/m ² /day and KPM SB33 (Beyer chrome village) - 1,610mg/m ² /day		In progress
1 August 2016	3	Kroondal	High levels of SOG in the pollution control dams. SOG limit is 2.5mg/l	Ensure daily inspections of separators by appointed contractor and that any problems are reported on time to site engineer and environmental department.	Completed

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Platinum Division continued					
1 September 2016	4	Kroondal	KPM SB01 (Mine main road) – 1820 mg/m ² /day and KPM SB33 (Beyer chrome village) - 1460 mg/m ² /day		Open
16 October 2016	4	Kroondal	KPM SB03 (Haul road) - 1360mg/m ² /day ; KPM SB05 (K150 Tailings dam) - 3080; KPM SB11 (Klipfontein 2) - 1040; KPM SB28 (Bleskop) - 711 and KPM SB33 (Beyer Chrome village) - 1290		In progress
1 November 2016	4	Kroondal	KPM SB03 (Haul road) - 1360mg/m ² /day ; KPM SB05 (K150 Tailings dam) - 3080; KPM SB11 (Klipfontein 2) - 1040; KPM SB28 (Bleskop) - 711 and KPM SB33 (Beyer Chrome village) - 1290	To suppress dust, tankers with spray systems being used twice daily on haul roads and use of sprinklers on tailings facilities increased	In progress
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