



Ohio Environmental Protection Agency

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March 30, 2010

Mr. Michael Kopf
Heartland Refinery Group
4001 East 5th Avenue
Columbus OH 43219

**Re: 1003-25-0656
Columbus
Franklin County**

Dear Mr. Kopf:

The purpose of this letter is to serve as a written follow-up and subsequent Notice of Violation (NOV) to an inspection conducted on March 22, 2010, by Michael Dalton, Ohio Environmental Protection Agency (Ohio EPA). This inspection revealed an oil discharge from Heartland Refinery at 4001 East 5th Avenue, Columbus, Ohio. The discharge entered Mason Run, a tributary of the Big Walnut Creek drainage system in violation of Sections 6111.04 and 3750.06 of the Ohio Revised Code (ORC).

Violation of Section 6111.04 ORC may subject Heartland Refinery Group to civil penalties of up to \$10,000.00 per day per violation, as well as criminal penalties of up to one year imprisonment and/or \$25,000.00 fine per day per violation. Violation of Section 3750.06 ORC may subject your company to civil penalties of up to \$25,000.00 per day per violation and/or criminal penalties of at least \$10,000.00 and up to \$25,000.0 and/or imprisonment for at least two years and up to four years per day per violation.

Ohio EPA received a report from the Defense Supply Center Columbus (DSCC) regarding oil sheen on Mason Run. The oil was traced to a tile discharging to a drainage ditch and then to Mason Run, from the southeast corner of the Heartland facility. Subsequent investigation by Heartland personnel determined the oil was from a leaking check valve in the process area of the plant.

The leaking valve was replaced, two underflow weirs were installed in the drainage ditch, and sorbent materials were placed at the weirs to absorb the oil for removal.

Ted R. G. ...
Lee Fisk ...
Chris Kodeski, Director

Mr. Michael Kopf
Heartland Refinery Group
Page -2-

Ohio EPA reserves its right, pursuant to Chapters 3704, 3714, 3734, 3750, 6109, and 6111 of the ORC and any other applicable state or federal laws or regulations to require further site investigation and abatement to address releases or discharges into the environment at the above designated site, and to seek civil penalties, reimbursement of the oversight costs, and any other appropriate legal or equitable relief for any violation of the law.

This letter is not a final action of the Director of the Ohio EPA and is intended only as a notification of a violation of the Ohio environmental laws and regulations. Thank you for your cooperation. If you have any questions, please contact me at 614-728-3823.

Sincerely,



Michael Dalton
On-scene Coordinator
Division of Emergency and Remedial Response
Central District Office

Enclosure: "Reporting a Hazardous Substance Release"

c: Ken Schultz DERR CDO Assistant Manager
Harry Kallipolitis DSW CDO Storm Water

File: 1003-25-0656

MD/nsm 000656 NOV

1003-25-0656 Heartland Petroleum LLC

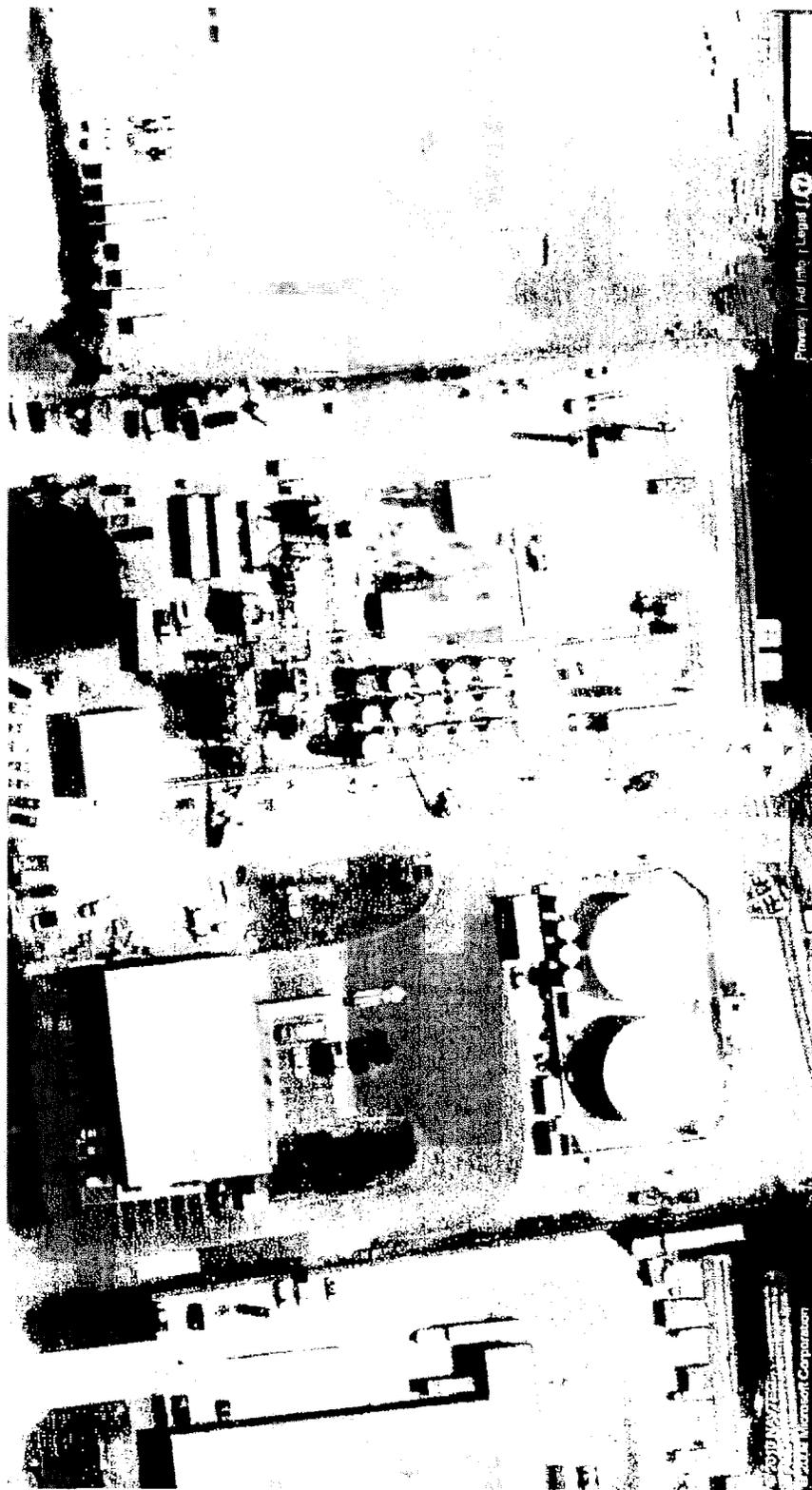


Figure 1: Aerial view of the Heartland Petroleum facility during late stage of construction. The storm water outfall is indicated by the red arrow. North is to the left. Photo from Bing Maps.

On-scene Coordinator Dalton

1003-25-0656 Heartland Petroleum LLC

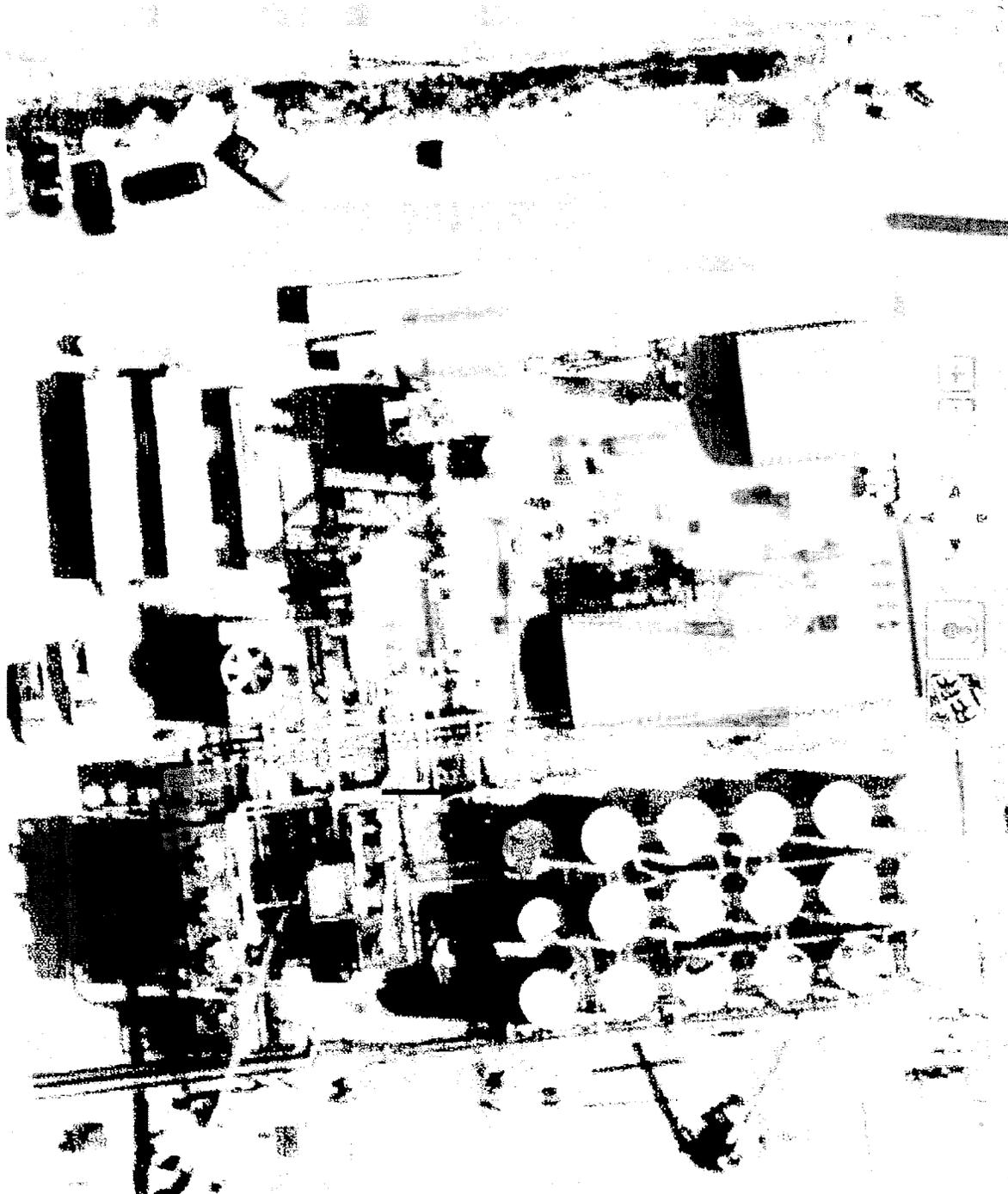


Figure 2: Location of the oily sump (blue arrow) and storm sewer catch basin (red arrow). North is to the left. Photo from Bing Maps.

On-scene Coordinator Dalton

1003-25-0656 Heartland Petroleum LLC



Figure 3: 03/22/2010 07:53 The underflow weir in the railroad ditch, just west of Mason Run.



Figure 2: 03/25/2010 15:48 One of the two catch basins in the storm sewer on the east side of the facility. The sorbent boom is routinely maintained in the catch basin and changed periodically.

On-scene Coordinator Dalton

1003-25-0656 Heartland Petroleum LLC

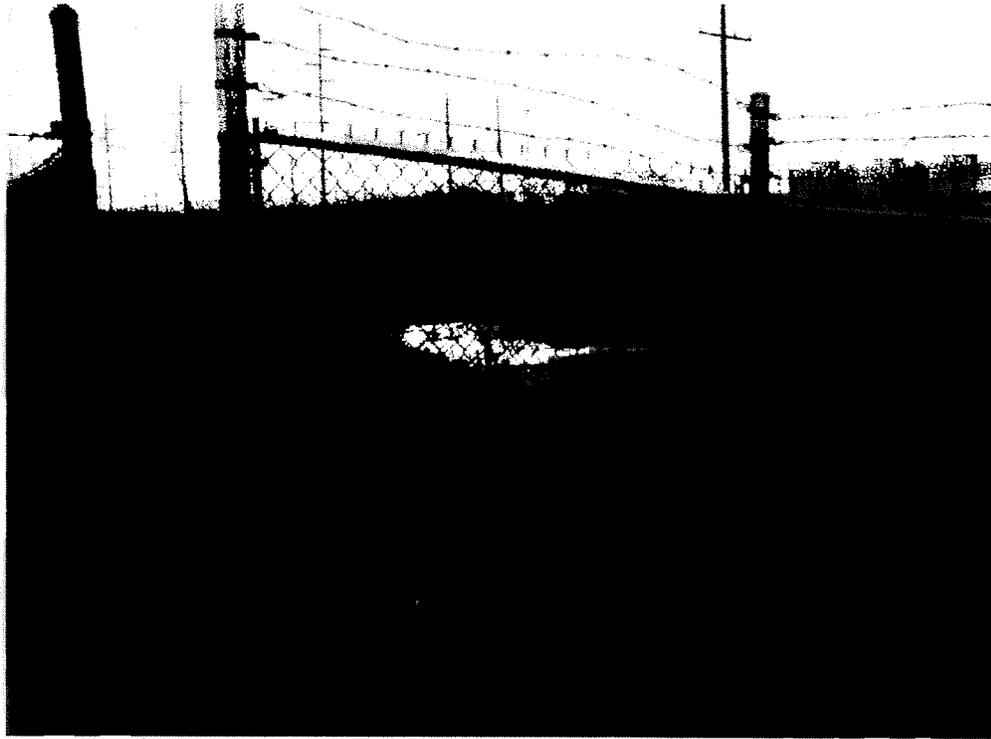


Figure 5: 03/25/2010 15:51 Looking through the boundary fence to the underflow weir at the storm sewer outfall in the ditch.

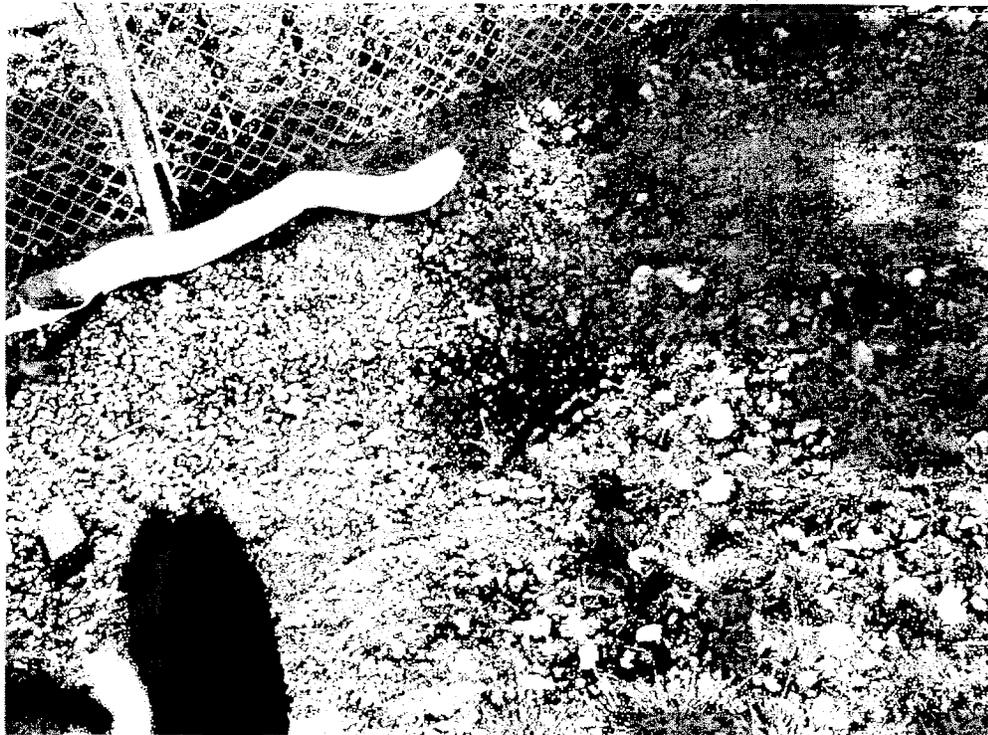


Figure 6: 03/25/2010 15:52 The storm sewer overflow outlet on the bank of the railroad ditch at the southeast corner of the property. This was the discharge point for the oil.

On-scene Coordinator Dalton

1003-25-0656 Heartland Petroleum LLC

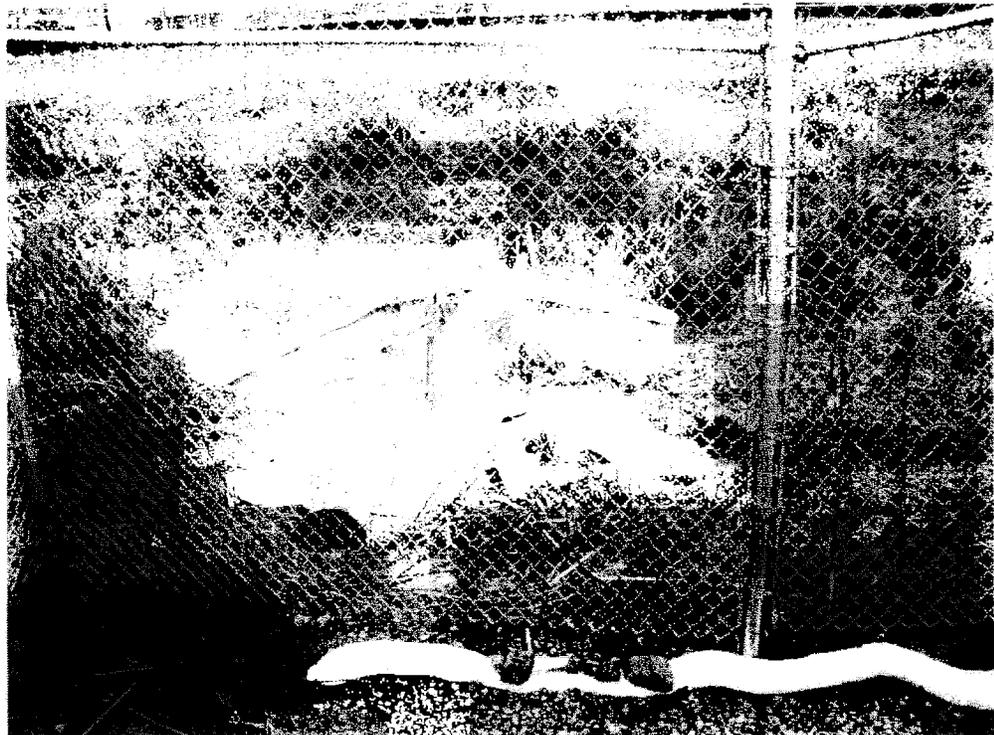


Figure 7: 03/25/2010 15:52 The storm sewer outfall is submerged in the water beyond the boundary fence in the area indicated by the arrow.

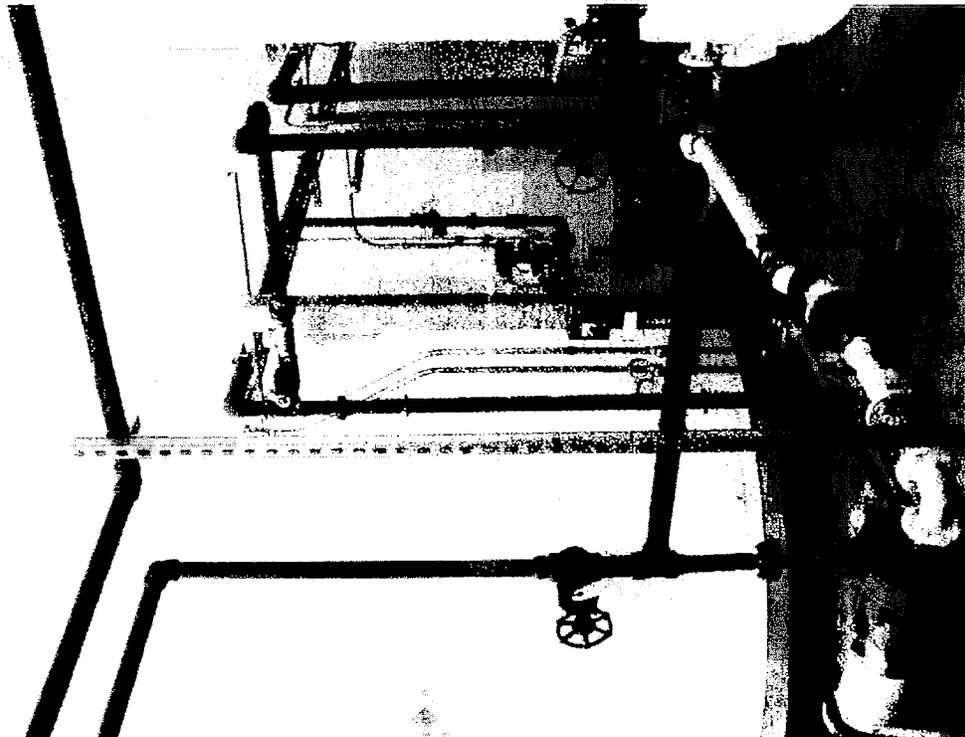


Figure 8: 03/25/2010 15:57 Piping in the area where the leak occurred. The arrow points at the replacement check valve.

On-scene Coordinator Dalton

1003-25-0656 Heartland Petroleum LLC

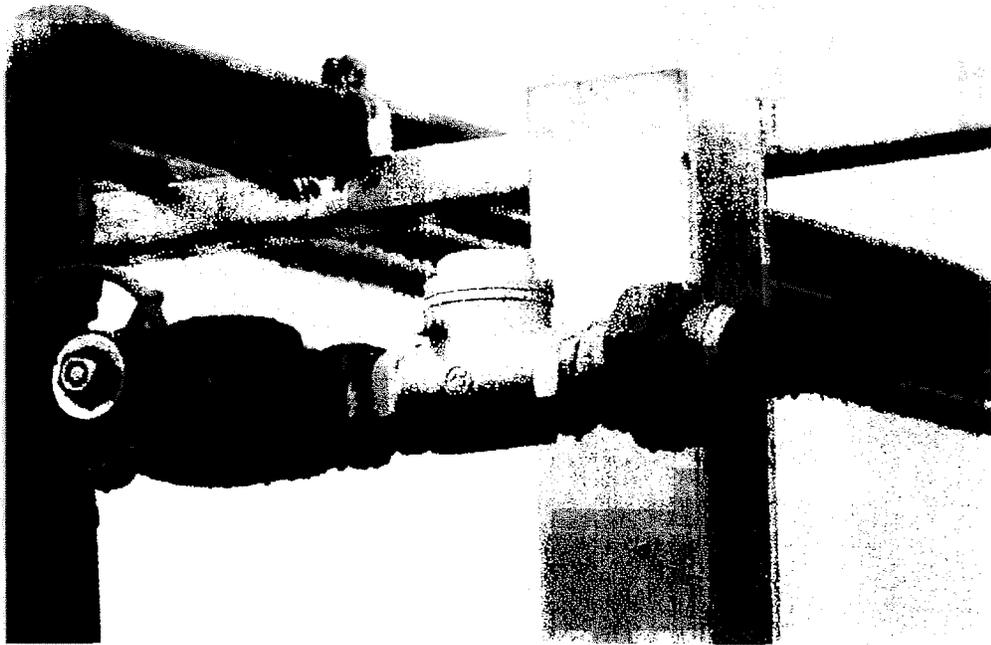


Figure 9: 03/25/2010 15:57 The replacement check valve.

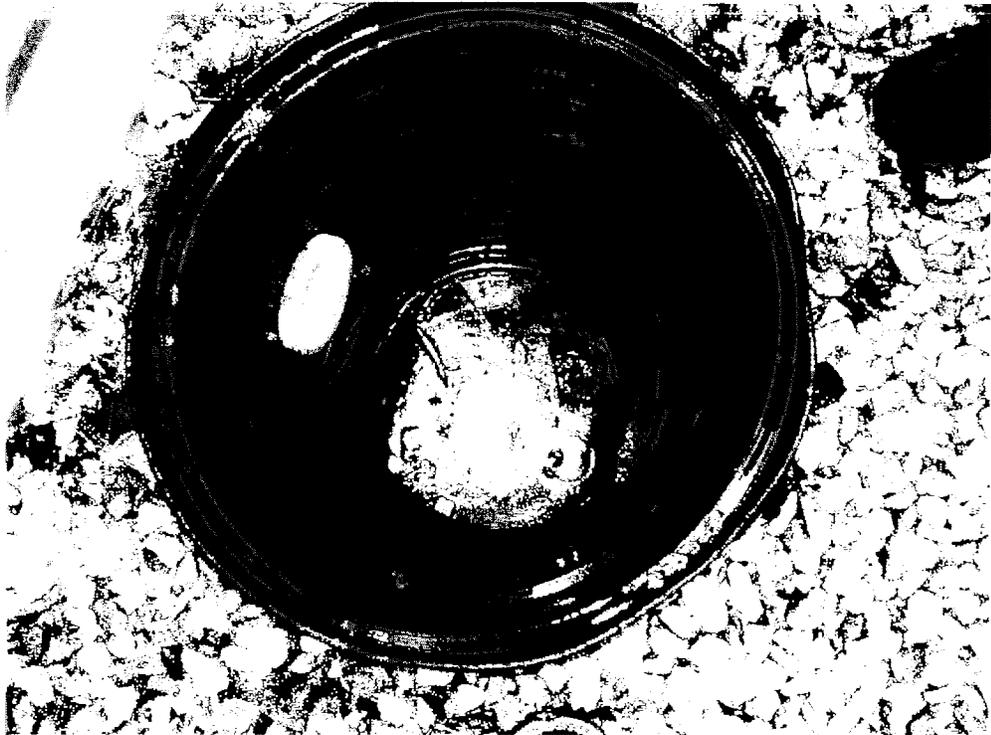
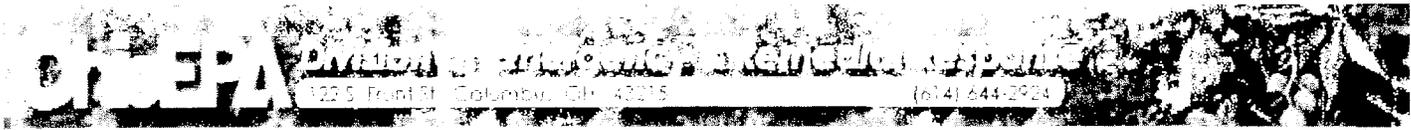


Figure 10: 03/25/2010 15:57 The interior of the small sump with oil on the water surface. The white pipe is capped outside the sump.

On-scene Coordinator Dalton



Emergency Response Section - District Office Investigation Report (DOIR)

Spill Id Number: 1003-25-0656
 Spill Status: FINAL

OSC: 1752 - DALTON, MIKE

Date **Time**
 Reported: 03/22/2010 08:10
 Discovered: 03/22/2010 08:00
 Occurred: 00/00/0000 UNK

Reported By: MICHAEL MOTT
Title: DEFENSE SUPPLY CENTER
Affiliation: NON-SPILLING COMPANY REPORTING /
Telephone: (614) 692-6732 **Extension:**

Spill Location Information

County: FRANKLIN **Latitude:** 39-59-04.6 N
City/TWP: COLUMBUS **Longitude:** 82-53-47.7 W
Location: 4001 EAST FIFTH AVENUE
Waterway: MASON RUN
Length: 1.100
Land Area: UNKNOWN

Entity Information

Name/Company: HEARTLAND REFINERY GROUP
Address: 4001 EAST FIFTH AVENUE
City: COLUMBUS **State:** OH **Zip Code:** 43219
Telephone: (614) 441-4001 **Ext:**
SPCC Plan Req: **SPCC Plan in Effect:**

Entity Representatives

Name	Title	Phone	Extension
MICHAEL KOPF	COMPLIANCE OFFICER	(614) 441-4001	
WARREN WRIGHT	ENGINEER	(614) 441-4001	

Products Spilled

Product	Amount	UOM	Type
OIL	.0	UNK	H

Source: FIXED FACILITY - INDUSTRY - PIPING (AOVE GROUND/OVERHEAD)
Cause: LEAK
Reason: UNKNOWN REASONS

Media Affected: SURFACE WATER/STORM SEWERS

Other Contacts

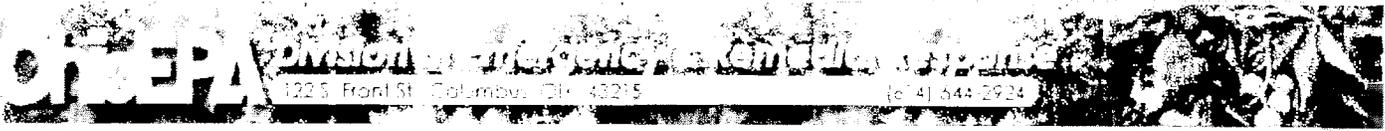
Name	Title	Phone	Extension
MIKE MOTT	DSCC SAFETY & ENVIRONMENTAL	(614) 692-6732	
PAUL KENNEDY	COLUMBUS REGIONAL AIRPORT	(614) 409-3347	

Referrals

Person	Agency Name	Referral Date
HARRY KALLIPOLITIS	DIV SURFACE WATER /WASTE WATER	03/29/2010

Supporting Documentation

Document	Document Date	Pages
TOPOGRAPHIC MAP	03/22/2010	1
AERIAL PHOTO	03/22/2010	1



Emergency Response Section - District Office Investigation Report (DOIR)

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OSC: 1752 - DALTON, MIKE

Spill Status: FINAL

Supporting Documentation

Document	Document Date	Pages
PHOTOS/SLIDES	03/23/2010	1
PHOTOS/SLIDES	03/25/2010	7



Emergency Response Section - District Office Investigation Report (DOIR)

Spill Id Number: 1003-25-0656

OSC: 1752 - DALTON, MIKE

Status: FINAL

Activity Date: 03/22/2010

Phone Followup: NO

03/22/2010 Part 1

Duty Officer Todd Taylor contacted OSC Dalton at 08:12 regarding a report from Mr. Mike Mott of DSCC of an oil sheen in Mason Run. There have been several instances of oil sheen on Mason Run recently and the source had not been found, so the OSC made an immediate response. First he checked Mason Run at Broad Street and confirmed the material in the creek was oil and not some other material. Next the OSC drove to 5th Avenue and checked Mason Run at the Columbus Air Center business park. No oil was visible on the water there and two sets of new sorbent booms were stretched across the creek in the concrete lined channel. If any oil had come out of the culvert under the facility it would have accumulated on the upstream side of the booms.

The OSC checked Mason Run south of 5th Avenue to see if the oil was discharging from a storm sewer under 5th Avenue. No oil was present immediately south of the bridge. The OSC walked south about 100 yards and checked the creek again and found nothing. A tributary to Mason Run enters DSCC from the east and flows through a property on Poth Drive, east of Yearling Road, formerly used by Kroger as a distribution center. The OSC checked this creek and again found no trace of oil. The OSC went to DSCC and traced Mason Run back to the north boundary, checking it at several locations to confirm the oil was still present. At the north boundary fence the creek flows through a short section of culvert, is open again for a few feet and then there is a culvert under multiple railroad tracks. The OSC found a heavy oil sheen coming out of the culvert at the boundary and could also see the sheen in the open section before the railroad culvert.

The OSC installed a containment boom immediately downstream of the security gate across the creek at the north boundary fence. Oil began to accumulate as soon as the boom was installed. The oil had no odor and appeared to be either a light lubricating oil or possibly hydraulic fluid. The OSC was not aware of any tiles discharging to Mason Run between 5th Avenue and the railroad tracks. He checked aerial photographs on Google Earth and determined there was a set of ditches on the north and south sides of the railroad tracks. There are industrial facilities to the east and west of Mason Run that could discharge to the ditches and the OSC left DSCC to check these ditches.

The ditch on the north side of the tracks and flowing from the west had a heavy oil sheen. The possible sources to the west included Heartland Refinery and the OSC decided to start checking there to locate a potential source. He arrived at Heartland at 10:24 and met with Mr. Mike Kopf, the compliance officer. They checked the ditch on the south side of the plant, along the railroad tracks. The ditch has a drainage divide at the Heartland property and the first location they checked drained to the west. There was nothing in this area and they walked to the east boundary of the property. There was no oil in the ditch until they reached the east boundary where they found a thin layer of oil floating on the water among cattails.

The oil was traced to a 12 inch plastic tile at the southeast corner of the boundary fence. Mr. Kopf said he thought this was the storm sewer for the parking lot. The OSC and Mr. Kopf checked two catch basin on the storm sewers and found a small amount of oil in the one closest to the outfall, but the next catch basin upstream had a significant oil accumulation on the water surface. Mr. Kopf said he wasn't sure of how the storm sewer was arranged, but he knew it was supposed to flow through a small pond that was intended to catch any oil. They checked the pond and only a trace of oil sheen was present. The pond has a heavy growth of cattails and the outlet structure was nearly submerged. Mr. Kopf told the OSC that the pond has accumulated too much sediment and needs to be cleaned out.

Emergency Response Section - District Office Investigation Report (DOIR)

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Status: FINAL

Activity Date: 03/22/2010

Phone Followup: NO

03/22/2010 Part 2

The source of the oil in the storm sewer was not immediately apparent. There weren't supposed to be any tiles entering the storm sewer from the process area and there weren't any oil stains on the gravel driveway nearby. Mr. Kopf led the OSC through the process area and they checked inside the various dikes around the process equipment; no oil was found in any of them. There were several large diameter plastic sumps in the alleys between the dikes and Mr. Kopf explained they were for the valves on the drain lines for the tiles from the dikes to the containment tank for contaminated water. These valves are kept closed and locked except to drain the dikes. The water is collected in the tank and then pumped out and taken by truck to a treatment facility off-site.

The OSC looked in two of the large sumps and found they both had water standing around the exposed piping and valve. There was no trace of oil in the water surface. He then noticed a small diameter plastic sump next to a dike and opened it. The water surface in this sump had a thin layer of oil on the surface. The OSC examined the interior of the sump and noted a series of holes near the bottom with water flowing in. No outlet tile was visible, but there was a PVC pipe that entered from the direction of the dike, near the level of the ground surface outside the sump. The sump was about 30 inches deep and the water surface was a few inches above the level of the bottom. Mr. Kopf said he had no idea how the oil could have gotten into the sump.

The OSC was concerned the oil was entering the sump from the surrounding gravel and might indicate a widespread problem of oil contamination. The oil appeared to be the same as the oil observed in the storm sewer. The OSC asked if there was a system of perforated tiles in the area that were intended to prevent accumulation of water under the dikes. Mr. Kopf said he did not know, he was not familiar with the engineering of the facility, the engineer was away but he would bring the issue to his attention when he returned. The OSC suggested they dig some holes through the gravel in the area and determine how widespread the oil was if it was infiltrating a tile or migrating through the gravel to the storm sewer.

Mr. Kopf and the OSC discussed possible methods to collect the oil from the storm sewer and the gravel. The OSC also asked Mr. Kopf to install underflow dams in the ditch to stop the migration of the oil to Mason Run. He described the construction of underflow dams using inclined pipes to carry the water from the bottom of an impoundment on the upstream side of the dam while the oil floated on the surface and could be removed as it accumulated. Mr. Kopf suggested they could build weirs using plywood sheets and pass the pipes through holes sawn through. It was agreed Heartland would install the weirs and proceed with investigating the source of the oil.

The OSC left the facility at 12:18.

03/23/2010

The OSC checked the weir in the railroad ditch near Mason Run. A small amount of oil had accumulated upstream of the weir between some sorbent pads floating on the water. There was no oil sheen downstream of the weir or on Mason Run. The OSC stopped at the Heartland Refinery office and spoke with Mr. Kopf. The second weir was installed as requested near the storm sewer outfall in the ditch at the corner of the property. They had not had time to start the investigation of the source of the oil in the gravel as yet. The plant engineer would start checking for the source today.

Emergency Response Section - District Office Investigation Report (DOIR)

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OSC: 1752 - DALTON, MIKE

Status: FINAL

Activity Date: 03/24/2010

Phone Followup: NO

03/24/2010

OSC Dalton wrote a field Notice of Violation and started writing the DOIR from 12:30 to 16:00. He also met with Mr. Mike Gallaway in the Division of Surface Water and was given a copy of the Heartland "Storm Water Pollution Prevention Plan."

03/25/2010

The OSC arrived at the Heartland facility at 15:30 and met with Mr. Kopf and Mr. Warren Wright, the plant engineer. The OSC gave Mr. Kopf the Notice of Violation. The OSC and Mr. Wright then walked through the process area while Mr. Wright explained what they found during the investigation. The tile where the oil was found on the 22nd was actually not intended to discharge to the ditch. It was supposed to flow in the opposite direction to the small pond. However the accumulation of sediment had blocked the tile and the water rose until it discharged via an overflow outlet to the ditch.

The sediment around both the inlet into the pond and the outlet to a second tile that was the intended outlet has been cleared away and the system is now draining properly. Mr. Wright showed the OSC the piping in the pond and explained the outlet was supposed to have a gravel filter surrounding it and the water would seep through this filter and into a riser via seepage holes near the bottom. It would then flow through the pipe to the ditch. The inlet pipe had a 45 degree angle section on its end, directed upward above the water surface. The inlet tile was nearly submerged and there was about three or four inches until the water in the tile could discharge into the pond. The OSC pointed out that this would prevent the oil in the pipe from discharging into the pond and trap it in the pipe. The purpose of this 45 degree fitting was not clear.

The OSC asked about any lateral tiles that connected to the storm sewer east of the process area. Mr. Wright said there were none; the only inlets into this tile are the two catch basins. The intention is for the tile and catch basins to receive surface water on the east side of the plant from the gravel driveway. All the driveways drain to the pond; those on the west side flow to a sump that is pumped to the pond. Any oil that spills from a transport will be caught in the pond and trapped by the riser that prevents anything on the surface from entering the outlet.

Mr. Wright was not aware of the small sump with the oil that the OSC had found on the previous visit and the OSC led him to it. Mr. Wright said the sump really served no purpose. What the OSC thought was a pipe leading from the dike was actually nothing more than a closed off stub. How the oil got into the sump was not known. Mr. Wright showed the OSC a series of excavations in the area that exposed the drain tiles from the dikes to the containment tank and none of them had encountered oil in the surrounding gravel. Mr. Wright speculated someone had poured a small amount of oil into the sump thinking it was connected to the drains.

Mr. Wright said the source of the oil was a leaking check valve on a pipe. The oil had accumulated in the dike and someone drained it without reporting the leak. Mr. Wright showed the OSC the replacement valve.

Emergency Response Section - District Office Investigation Report (DOIR)

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OSC: 1752 - DALTON, MIKE

Status: FINAL

Activity Date: 03/25/2010

Phone Followup: NO

03/24/2010 Part 2

The OSC and Mr. Wright rejoined Mr. Kopf and discussed the situation. Heartland has contacted a manufacturer about an oil/water separator that can be installed on the tile from the pond to the ditch. The weirs will be maintained until a permanent solution is installed to prevent future oil spills from reaching the ditch. They have cleaned around the outlet from the pond and plan to remove the accumulated sediment. Mr. Kopf returned the NOV to the OSC and pointed out the name of the facility was incorrect. The OSC said he would correct the NOV and send a new copy. Mr. Kopf said they will continue to have personnel check the weirs and remove accumulated oil as necessary until it stops accumulating.

The installation of any changes in the storm water system fall under the purview of the Division of Surface Water and the OSC will give a copy of this report to Mr. Harry Kallipolitis, who oversees Heartland's storm water permit. Nothing further is required for this incident and the file is now closed.

03/26/2010

Writing the DOIR from 10:24 to 15:36.

Emergency Response Section - District Office Investigation Report (DOIR)

Spill Id Number: 1003-25-0656

OSC: 1752 - DALTON, MIKE

Response Date: 03/22/2010

Start Time: 08:12 End Time: 12:48 Total Mileage: 23.00

Time Code	Regular Time	Overtime	Total
0022	4.6	.0	4.6
Total Time:			4.6

OSC: 1752 - DALTON, MIKE

Response Date: 03/22/2010

Start Time: 13:30 End Time: 16:00 Total Mileage:

Time Code	Regular Time	Overtime	Total
0100	2.5	.0	2.5
Total Time:			2.5

OSC: 1752 - DALTON, MIKE

Response Date: 03/23/2010

Start Time: 07:12 End Time: 08:54 Total Mileage: 25.00

Time Code	Regular Time	Overtime	Total
0022	1.7	.0	1.7
Total Time:			1.7

OSC: 1752 - DALTON, MIKE

Response Date: 03/24/2010

Start Time: 12:30 End Time: 16:00 Total Mileage:

Time Code	Regular Time	Overtime	Total
0100	3.5	.0	3.5
Total Time:			3.5

OSC: 1752 - DALTON, MIKE

Response Date: 03/25/2010

Start Time: 15:06 End Time: 16:42 Total Mileage: 22.00

Time Code	Regular Time	Overtime	Total
0022	1.6	.0	1.6
Total Time:			1.6

Emergency Response Section - District Office Investigation Report (DOIR)

Spill Id Number: 1003-25-0656

OSC: 1752 - DALTON, MIKE

Response Date: 03/26/2010

Start Time: 10:24

End Time: 15:36

Total Mileage:

Time Code	Regular Time	Overtime	Total
0100	5.2	.0	5.2
Total Time:			5.2
Grand Total for this Spill:			19.1