

POSTED
DATE: 09/21/07
INITIALS: JK

DEPARTMENT OF ECOLOGY
NOV 15 2006
WATER QUALITY PROGRAM

SO3-000570D

INDUSTRIAL STORMWATER GENERAL PERMIT
DISCHARGE MONITORING REPORT

MONITORING PERIOD for (year/quarter): 2006 year Jan/Feb/Mar Apr/May/June Jul/Aug/Sep Oct/Nov/Dec

Facility/Site Information

SOLVAY INTEROX SOLVAY CHEMICALS, INC.
Location: 3500 INDUSTRIAL WAY
County: COWLITZ

Primary SIC Code: 2819

Mailing Information

SOLVAY INTEROX SOLVAY CHEMICALS, INC.
3500 INDUSTRIAL WAY
LONGVIEW WA 98632-8213

You must send a Discharge Monitoring Report (DMR) to Ecology **every quarter**. If there was **no discharge** or you have **suspended sampling** because of consistent attainment of benchmark values, mark the appropriate boxes and send the DMR to Ecology. Please read the instructions before completing the DMR.

Discharge Point <u>4 - SOUTHEAST OUTFALL (OUTFALL-SE)*</u>						
There was no qualifying storm event this quarter so no values are entered below (see explanation)						
Quarterly Monitoring		AVERAGE	MAXIMUM	UNITS	Sample Type	Events Sampled
pH	<u>Consistent Attainment</u>			Standard Units		
Zinc (total)	Consistent Attainment		285	µg/L	Grab	
Oil & Grease	<u>Consistent Attainment</u>			mg/L	Grab	
Nitrate/Nitrite as N	Consistent Attainment		0.9	mg/L	Grab	
Phosphorus (TP)	<u>Consistent Attainment</u>			mg/L		
BOD5	<u>Consistent Attainment</u>			mg/L		

Monitoring associated with impaired waterbodies:

Discharge Point <u>4 - SOUTHEAST OUTFALL (OUTFALL-SE)*</u>						
There was no qualifying storm event this quarter so no values are entered below (see explanation)						
Quarterly Monitoring		AVERAGE	MAXIMUM	UNITS	Sample Type	Events Sampled
Turbidity	<u>Consistent Attainment</u>			NTU		
Oxygen, Dissolved (DO)	Consistent Attainment		8.95	mg/L	Grab	

Additional Metal Sampling

Discharge Point 4 - SOUTHEAST OUTFALL (OUTFALL-SE)*

Quarterly Monitoring	Maximum	Units	Sample Type
Copper (Total)	24	mg/L	Grab
Lead (Total)	5.4	mg/L	Grab
Hardness	19	mg/L	Grab

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (PENALTIES UNDER THESE STATUTES MAY INCLUDE FINES UP TO \$10,000.00 AND OR MAXIMUM IMPRISONMENT OF BETWEEN SIX MONTHS AND FIVE YEARS.)

ROBERT R. MAY MANUF. MGR/SITE COORDINATOR NOV. 10 2006
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER (TYPED OR PRINTED) DATE: MO DAY YEAR



SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

360-425-1114

TELEPHONE NUMBER

COMMENTS / EXPLANATIONS

#The discharge point was noted as discharge point "4" on the "Receiving Water Information and Declaration of Mixing Zone" form



SOLVAY CHEMICALS

INTEROX, FLUORIDES & MINERALS

DEPARTMENT OF ECOLOGY
NOV 15 2006
WATER QUALITY PROGRAM

November 10, 2006

Joyce M. Smith
Industrial Stormwater Permit Coordinator
Washington State Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

RE: Level One Source Control Report for Samples Above the Benchmark Value for Zinc and Nitrate/Nitrite as N at the Solvay Chemicals, Inc. Facility in Longview, WA

Dear Ms. Smith:

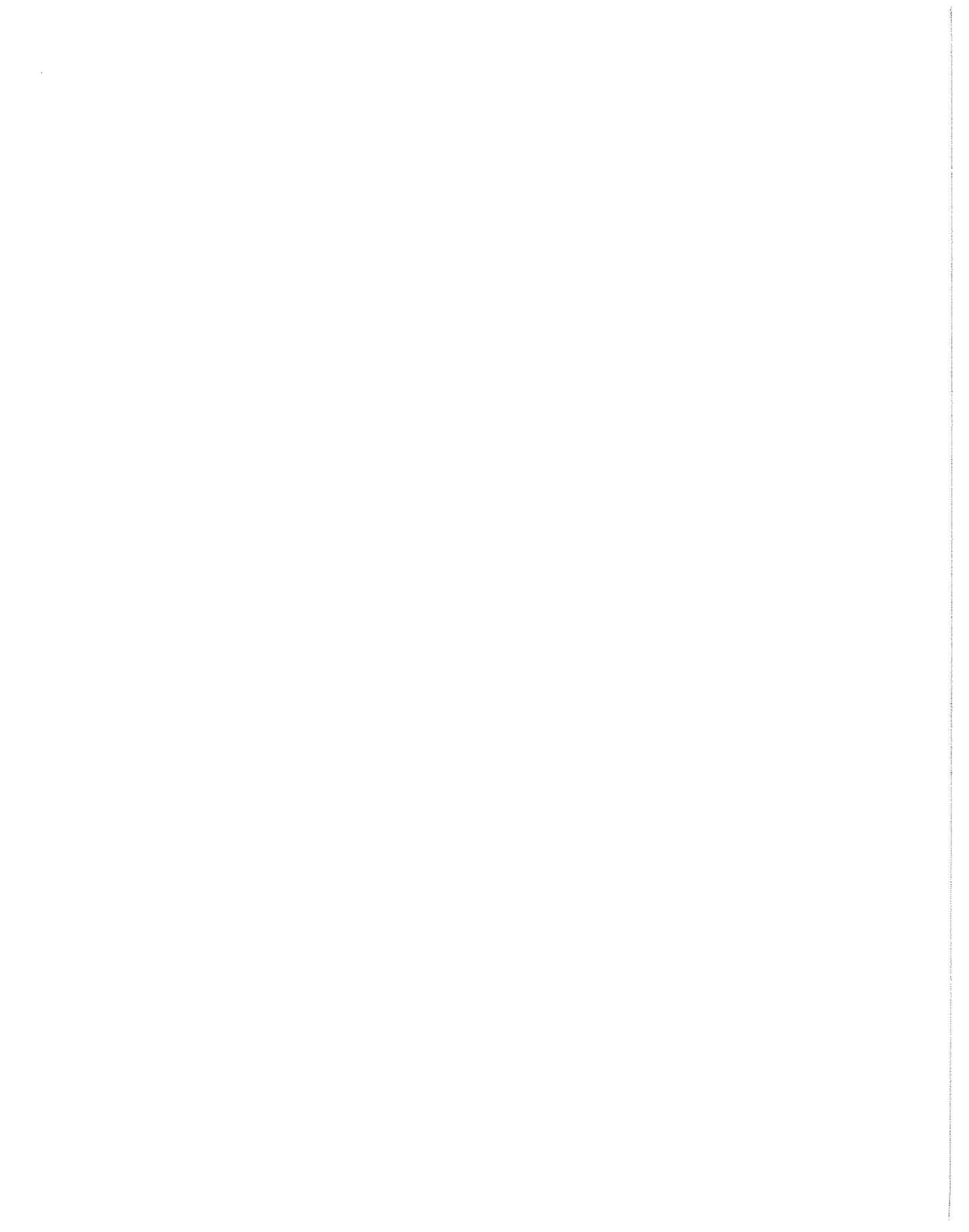
Enclosed are the Level One Source Control Reports for samples above the benchmark value for zinc and nitrate/nitrite as N at the Solvay Chemicals, Inc. facility in Longview, WA. The zinc and nitrate/nitrite as N values obtained from sampling during the second quarter of 2006 were above the benchmark value, which prompted this report.

If you have any questions or require additional information, please feel free to contact me at 360-577-7567.

Best regards,

Alicia B. Fuentes

Technical Services Manager



Summary of Solvay Chemicals, Inc - Longview, WA Facility Inspection in Response to Sample Results Above Benchmark Values for Zinc

Date Inspection Conducted: 9/27/06
Inspector: Alicia Fuentes

Summary

A walkthrough of the facility was conducted, and only one new potential source of zinc was identified from the walkthrough. The new item was truck trailer and delivery vehicle tires, which can be a potential source of zinc contamination. Other possible sources of zinc previously identified are galvanized materials that come into contact with stormwater: storm drain piping, the fence surrounding the facility, light posts, structural steel (nearly all stormwater that contacts structural steel at the facility is collected and treated as process wastewater), and barricades. Another possible source for zinc is the asphalt paved areas of the plant. However, galvanized steel or asphalt will typically not leach zinc into water unless the pH is acidic, and the pH of our stormwater samples have been between 6.8-7.7. Solvay America's Environmental Manager researched zinc levels in soil in the area, and found that the zinc concentration in soil is highly dependent on whether land has been previously cultivated. If the land has been cultivated, zinc levels can typically be several orders of magnitude higher than if the land has not been cultivated. Zinc is a common component of fertilizer, and since our site was once part of the Mint Farm in Longview, this may be contributing to the zinc in stormwater that runs off our site.

No remedial actions were taken to control these potential sources of zinc.

Summary of Solvay Chemicals, Inc - Longview, WA Facility Inspection in Response to Sample Results Above Benchmark Values for Nitrate/Nitrite as N

Date Inspection Conducted: 9/27/06
Inspector: Alicia Fuentes

Summary

The original Level 1 inspection conducted on 8/17/05 yielded the following possible sources of nitrate/nitrite:

- Large H₂O₂ spills from the loading rack area – Spills of H₂O₂ at the loading rack are typically drained through a u-drain to the tank farm basin. However, a large spill could partially drain into the storm system. Since our H₂O₂ product contains nitrate, the loading rack area is a potential source of nitrates. However, no large spills have occurred at the loading rack for many years due to a number of systems in place to prevent overflowing of shipment vessels. In addition, a similar concentration of phosphorous and nitrate is present in our H₂O₂, and we have never witnessed elevated levels of phosphorous in our stormwater samples. Therefore, it is unlikely that nitrates present in the stormwater can be attributed to H₂O₂.
- Hydrogen peroxide (H₂O₂) contamination from the H₂O₂ storage tank farm basin and u-drains in the distillation sector – The basin and u-drains can contain small amounts of low-strength H₂O₂. The basin and u-drains are made of concrete and appear to be in great condition overall (i.e. no cracks or obvious settling), and we do not suspect that any liquid is seeping out of the basin or the u-drains. H₂O₂ contains both nitrate and phosphorus in similar concentrations, and since we have never witnessed elevated levels of phosphorus in our stormwater, it is unlikely that nitrates present in the stormwater are from H₂O₂ seeping out of the basin or the u-drains.
- Soil – The land that our facility is on was once a farm, and the nitrate/nitrite in our stormwater could be residual in the soil from farming fertilizer.

During this inspection, one additional potential source of nitrate/nitrite was identified: spills of ammonium nitrate or sodium nitrate in uncontained areas that drain to the stormwater pond. There have been a few small spills of ammonium nitrate in the past few years, but standard protocol is to scoop up spilled ammonium or sodium nitrate pellets immediately after the spill, so no significant residual from spills should enter the storm drain system.

No remedial actions were taken to control these potential sources of nitrate/nitrite.

