

State of Washington Department of Ecology  
Northwest Regional Office  
**STORMWATER COMPLIANCE INSPECTION  
REPORT**

WADOE Stormwater  
Compliance Inspection Form  
(last file update 4-04.)

Facility Type:  
☒ Industrial ☐ Boatyard  
☐ Construction ☐ S & G

Section A: General Data

Inspection Date 11/05/2009	NPDES Permit # <b>WAR003231D</b>	County King	Receiving Waters Duwamish River
Discharges to: Surface Water <input checked="" type="checkbox"/> Ground Water <input checked="" type="checkbox"/>		Weather at time of inspection: Raining	

Section B: Facility Data

Name and Location of Facility Inspected  Jorgensen Forge Corporation 8531 E. Marginal Way S. Seattle, WA 98108-4018	Entry Time 9:45 am	Permit Effective Date 1-01-10
	Exit Time 2:30 pm	Permit Expiration Date 1-01-15
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Ron Altier/VP- Administration/206-676-9249 Wayne Desberg/Engineering Manager/206-965-1326		Other Participants: John Keeling - Ecology's Toxic Cleanup Program Raman Iyer - Compliance and Technical Assistance Unit Supervisor, Water Quality Program, Department of Ecology
Name, Address of Responsible Official/Title/Phone and Fax Number. Ron Altier/Vice President - Administration 8531 E. Marginal Way South Seattle, WA 9810-4018 Phone Number 206-762-1100 Fax 206-357-1063 Contacted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Samples Taken? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Photos Taken? <input checked="" type="checkbox"/> <input type="checkbox"/>

Section C: Areas Evaluated During Inspection.

<input checked="" type="checkbox"/> NPDES Permit Available	<input type="checkbox"/> Wet & Dry Season Inspection Reports	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Effluent/Receiving Water
<input type="checkbox"/> Storm Water Pollution Prevention Plan Available	<input type="checkbox"/> Employee Training Records	<input checked="" type="checkbox"/> Oil/Water Separator	<input type="checkbox"/> Pretreatment
<input checked="" type="checkbox"/> SPCC Plan & Equipment	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Solid Waste Disposal	<input type="checkbox"/> Laboratory
<input type="checkbox"/> Erosion and Sediment Control Plans	<input type="checkbox"/> Monitoring Plan	<input checked="" type="checkbox"/> Catch Basins	<input type="checkbox"/> 0.5 inch Inspection Logs
<input checked="" type="checkbox"/> DMR Submittals	<input checked="" type="checkbox"/> Fuel/Chemical Storage	<input type="checkbox"/> Track out / Wheel wash	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section D: Summary of Findings/Comments

**Background:**

This compliance inspection was conducted as part of a Department of Ecology inspection program to control the potential sources of pollutants discharged to the Duwamish waterway through storm drainage systems. John Keeling, Site Manager with Ecology's Toxic Cleanup Program and Raman Iyer, Compliance and Technical Assistance Unit Supervisor with Ecology's Water Quality Program also participated in this inspection.

The last NPDES permit compliance inspection conducted by Ecology at Jorgensen Forge was on January 13, 2006. Permit compliance issues noted during that inspection included zinc discharges in excess of the benchmarks.

Jorgensen manufactures precision machined forgings for the commercial aircraft, aerospace, energy (oil exploration), power generation, automotive, and shipbuilding industries. The 20 acre facility is located on the Duwamish River but does not have overwater structures or riverside operations.

The Department of Ecology and US Environmental Protection Agency have several administrative orders regarding site contamination investigation and cleanup.



**Inspection/Observations:**

Raman Iyer, John Keeling and I arrived at the facility at approximately 9:45 am and met with Ron Altier, Vice President of Administration. Ron is the designated corporate official for NPDES permit compliance. Mr. Altier was sure that the Stormwater Pollution Prevention Plan (SWPPP) dated March 2006, had been recently updated but could not locate it. An electronic copy of the most current Site Map was located and printed for use during the site inspection. Electronic access to the current SWPPP dated July 2009, was provide to Ecology the following day.

The facility stores a large amount of scrap material outside in metal bins, dumpsters and bunkers. The new NPDES Industrial Stormwater General Permit requires: "No later than July 1, 2010, Keep all dumpsters under cover or fit with a lid that must remain closed when not in use" (see Photos # 3-6 and 11, 12).

The facility stores a lot of scrap metal outside in various types of bins and dumpsters. A whitish cutting oil/coolant could be seen at the bottom of a scrap metal storage bin and cutting oil/coolant could be seen on the pavement nearby (see Photos #3, 4).

Miscellaneous scrap materials and wastes stored outside should be inventoried and covered as necessary. Dumpsters with lids must be kept closed when not in use.

The pressure wash/steam cleaning station is located near the laboratory (see Photos # 7, 8, 10). This facility is plumbed to the sanitary sewer through an oil/water separator. All wash-water is defined as process wastewater and cannot be discharged to the storm drainage system. Some of the area around the pressure wash/steam cleaning station flows to the storm drainage system. The footprint of the cleaning station must be clearly depicted on the Site Map in the SWPPP and on the ground with markings or a painted line. It must be clear to everyone working in the vicinity of the cleaning station, which areas drain to the sanitary sewer and which to the storm drainage system.

The facility must provide adequate cover and containment for all liquid petroleum and chemical products and wastes stored outside.

Metal turnings and cuttings must be covered, stored under cover or inside (see photos # 11, 12).

Stormwater run-off from the metal turnings/cuttings storage bunkers in photos # 13 and 14 is likely to be contaminated. Stormwater run-off from this area either flows to storm drains or infiltrates. Jorgensen must determine whether or not stormwater from this area can possibly get into the storm drainage system. The scrap metal storage bunkers seen in photos # 13, 14 must be provided with improved source control measures and pollution prevention practices. It is not clear where stormwater from this area flows. Infiltrating contaminated stormwater near the river with a high groundwater table is problematic.

The southern portion of the facility is partially paved and is mostly used to store scrap metal and waste materials. Outfall lines # 001 and 002 flow under this area. The southwest corner of the facility is unpaved (see Photo # 17). There are no storm drains in the vicinity and most stormwater infiltrates into the ground. Given the close proximity to the Duwamish River, the facility must ensure that stormwater cannot flow overland towards the river between the concrete wall and the building (see Photo # 18). Contaminated stormwater infiltrating in this area may find a pathway to the river along the outside of storm drain lines # 001 and 002.

A variety of scrap metals and solid wastes are stored out in the open along the southern boundary of the facility (see Photos # 16, 19, 20, 21). Source control measures must be re-evaluated in this area. During rainy periods, stormwater from this area will flow towards storm drains or infiltrate.

The Site Map shows there is at least one catch basin in the scrap material storage area. The facility must inventory wastes stored along the southern portion of the facility and implement necessary source control measures for the pollutants that will mobilize during storm events. The scrap metal stored in an ecology block bunker (see Photos # 21, 22) has enough petroleum in it to warrant the use of absorbent pads (see Photo # 22). This material needs to be stored under cover. Stormwater in this area was reddish brown and had a visible sheen on it. This stormwater is either infiltrating or flowing towards a storm drain (see Photo # 24).

The unpaved area just south of the Aluminum Heat Treat Area was contributing to very turbid run-off flowing to the nearby storm drain catch basin (see Photos # 25, 26) which is tributary to Outfall 002. A visible petroleum sheen on stormwater flowing into a catch basin tributary to the Duwamish River must elicit a source tracing investigation to determine the source.

Empty drums may have residual petroleum and/or chemicals on them that will mobilize if left out in the rain (see Photo # 27). All containers of liquid products and wastes stored outside must be provided with adequate cover and containment (see Photo # 28).

**Issues & Requirements:**

The Stormwater Pollution Prevention Plan must be on site and available for review by unannounced inspectors.

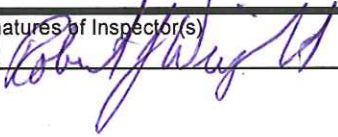

The facility must provide adequate cover and containment for all liquid petroleum and chemical products and wastes stored outside.

Metal turnings/cuttings must be covered, stored under cover or kept inside.

The footprint of the cleaning station must be clearly depicted on the Site Map in the SWPPP and on the ground with markings or a painted line.

Jorgensen must determine whether or not stormwater from the scrap metal storage bunkers near the melt baghouse can possibly get into the storm drainage system.

Contact Robert Wright at 206-909-6640 with any questions or concerns regarding this report.

Name(s) and Signatures of Inspector(s) Robert Wright 	Agency/Office/Telephone WA Dept. of Ecology/ NW Regional Office/ 425-649-7060  3190 160 <sup>th</sup> Ave SE, Bellevue, WA 98008-5452	Date 12-29-09
Signature of Management Q A Reviewer 	Agency/Office/Phone and Fax Numbers WA Dept. of Ecology/NWRO/ (425) 649-7000 Fax (425) 649-7098	03/12/10

**UNANNOUNCED** Inspection



## PHOTO ADDENDUM

Jorgensen Forge, Seattle

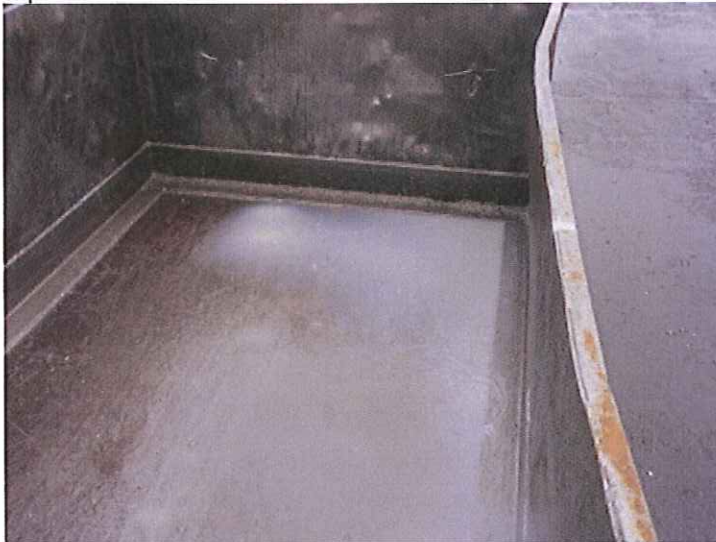
Date: November 5, 2009



**#1. DESCRIPTION:** Jorgensen Forge occupies approximately 20 acres on the Duwamish River. The buildings are in the shape of an "L". Most of the outside areas are concrete or asphalt.



**#2. DESCRIPTION:** The Duwamish River is beyond the large tan overhead ducting. The facility has no overwater structures or any water-side operations.



**#3. DESCRIPTION:** The facility stores a lot of scrap metal outside in various types of bins and dumpsters. A whitish cutting oil/coolant can be seen at the bottom of this scrap metal storage bin.



**#4. DESCRIPTION:** Cutting oil/coolant could be seen on the pavement near this scrap metal bin. Scrap metal stored in bins or dumpsters outside must be provided with proper cover.



## PHOTO ADDENDUM

Jorgensen Forge, Seattle

Date: November 5, 2009



**#5. DESCRIPTION:** Of these two dumpsters, one has a lid and one does not. Procedures must be developed to ensure the lid is closed when access is not necessary.



**#6. DESCRIPTION:** Miscellaneous scrap materials and wastes should be inventoried and stored inside or covered as necessary.



**#7. DESCRIPTION:** The grated area is for pressure washing and steam cleaning. The grated area is plumbed to the sanitary sewer. Chemicals and petroleum products must be provided with proper containment.



**#8. DESCRIPTION:** All wash-water is defined as process wastewater and cannot be discharged to the storm drainage system. Some of the area around the grating flows to the storm drainage system. The facility must clearly mark the "footprint" of the area that flows to the sanitary sewer. The Site Map in the SWPPP should be updated to clarify which areas are tributary to the sanitary sewer and which go to the storm drainage system in this area.



## PHOTO ADDENDUM

Jorgensen Forge, Seattle

Date: November 5, 2009



**#9. DESCRIPTION:** The facility must provide adequate cover and containment for all liquid petroleum and chemical products and wastes stored outside.

**#10. DESCRIPTION:** The footprint of the area tributary to the sanitary sewer needs to be clearly delineated so staff knows if wastewater may be flowing to storm drains.



**#11. DESCRIPTION:** Metal turnings and cuttings must be stored in bins or dumpsters with a cover.



**#12. DESCRIPTION:** These scrap metal bins must be covered, stored under cover or inside.



## PHOTO ADDENDUM

Jorgensen Forge, Seattle

Date: November 5, 2009



**#13. DESCRIPTION:** Stormwater run-off from this area is likely to be contaminated. This area is within the Outfall 003 drainage basin. The facility must determine where stormwater from this area goes. This pile of metal turnings/cuttings must be provided with adequate source control.



**#14. DESCRIPTION:** This scrap metal storage area must be provided with more adequate source control. It is not clear where stormwater from this area flows. Infiltrating contaminated stormwater near the river with a high groundwater table is problematic.



**#15. DESCRIPTION:** All liquid products and wastes must be provided with adequate cover and containment. The concrete floor of this storage area is recessed and has a lip around it.



**#16. DESCRIPTION:** The southern portion of the facility is partially paved and is used to store scrap metals and waste materials. Stormwater from this area either flows to Outfall 001 or Outfall 002 or infiltrates into the ground.



## PHOTO ADDENDUM

Jorgensen Forge, Seattle

Date: November 5, 2009



**#17. DESCRIPTION:** The southwest corner of the facility is unpaved. There are no storm drains in the vicinity and most stormwater infiltrates into the ground. The Duwamish River is on the other side of the concrete wall.



**#18. DESCRIPTION:** Storm drain lines 001 and 002 flow under this area. The facility must ensure that stormwater cannot flow overland towards the river between the concrete wall and the building (just to right of orange cone). Contaminated stormwater may infiltrate and then flow along the outside of storm drain lines 001 or 002.



**#19. DESCRIPTION:** The southern portion of the facility is called the scrap storage area. A variety of scrap metals and solid wastes are stored here out in the open. Source control measures must be re-evaluated in this area. During rainy periods, stormwater from this area will flow towards storm drains or infiltrate in the ground.



**#20. DESCRIPTION:** The Site Map shows there is at least one catch basin in the scrap storage area. The facility must inventory wastes stored along the southern portion of the facility and implement necessary source control measures for pollutants that will mobilize during storm events.



## PHOTO ADDENDUM

Jorgensen Forge, Seattle

Date: November 5, 2009



**#21. DESCRIPTION:** Scrap metal is stored in ecology block bunkers. This material is metal chips (or turnings or cuttings) and should be provided with cover.



**#22. DESCRIPTION:** The scrap metal seen in photo # 21 is on the other side of this ecology block wall. Apparently the metal chips have enough petroleum on them to warrant the use of absorbent pads to control petroleum in the stormwater.



**#23. DESCRIPTION:** Materials stored outside in the scrap storage area must be covered.



**#24. DESCRIPTION:** Stormwater will pool in areas without adequate drainage. Stormwater from this area may eventually find an avenue to flow towards the river. The stormwater pooling in this area was reddish brown and had a petroleum sheen visible on it.



## PHOTO ADDENDUM

Jorgensen Forge, Seattle

Date: November 5, 2009



**#25. DESCRIPTION:** This storm drain is tributary to the Outfall 002. The nearby unpaved area was contributing very turbid stormwater to this catch basin. This area is at the southeast corner near the Aluminum Heat Treat building.



**#26. DESCRIPTION:** The turbid stormwater flowing to the storm drain catch basin had a visible petroleum sheen on it. A visible petroleum sheen on stormwater flowing to a catch basin tributary to the Duwamish River must elicit an investigation to determine the source.



**#27. DESCRIPTION:** Most of these drums were empty but residual petroleum and/or chemicals may mobilize if left out in the rain.



**#28. DESCRIPTION:** All liquid products and wastes stored outside must be provided with adequate cover and containment.