

State of Washington Department of Ecology  
Eastern Regional Office  
**WATER COMPLIANCE INSPECTION REPORT**

substitute for OMB No. 2040-0057 and EPA form 3560-3 (Rev. 9-94) (last file update 12-95.)

Section A: National Data System Coding (i.e., PCS)

Transaction Code 1 <b>N</b> 2 <b>5</b>	NPDES # 3 <b>WA-0000892</b> 11	yr/mo/day 12 <b>11/06/24</b> 17	Inspection Type 18 <b>C</b>	Inspector 19 <b>S</b>	Fac Type 20 <b>2</b>
Remarks					
Kaiser Aluminum Fabricated Products, Class I Inspection					
Inspection work days 67 <b>1.0</b> 69	Facility Self-Monitoring Evaluation Rating 70 <b>5</b>	BI 71 <b>N</b>	QA 72 <b>N</b>	-----Reserved----- 73 _____ 74 _____ 75 _____ 80	

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) <b>Kaiser Aluminum Fabricated Products Trentwood Works 15000 E Euclid Ave Spokane Valley, WA 99215</b>	Entry Time/Date 10:00 AM / Jun. 24, 2011  Exit Time / Date 12:00 PM / Jun. 24, 11	Permit Effective Date 07/01/11  Permit Expiration Date 06/30/16
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) <b>Bud Leber Environmental Engineering Manager (509) 927-6554; (509) 927-6095 fax</b>	Other Facility Data	
Name, Address of Responsible Official/Title/Phone and Fax Number.  <b>Michael Zerga Vice President P.O. Box 15108, Spokane Valley, WA 99215 Phone Number (509) 924-1500 Fax _____</b>		
Contacted ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Operations&Maint.	<input type="checkbox"/> CSO/SSO (Sewer Overflow)
<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Self-Monitoring Program	<input checked="" type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Pretreatment	<input type="checkbox"/> Multimedia
<input checked="" type="checkbox"/> Effluent/Receiving water	<input type="checkbox"/> Laboratory	<input checked="" type="checkbox"/> Storm Water	<input type="checkbox"/> other

Section D: Summary of Findings/Comments

**Permit:** Ecology recently re-issued the permit to the facility with an effective date of July 1, 2011.

**Facility Site Review:** Kaiser manufactures aluminum sheet and plate, mostly for use in aircraft manufacturing. The facility discharges process wastewater and excess groundwater into the Spokane River (outfall 001). Process wastewater consists of non-contact and contact cooling water (outfalls 004 and 005), industrial process wastewater (outfall 002), site stormwater, and sanitary wastewater (outfall 003). These wastestreams are all routed to a lined settling lagoon, then to a black walnut shell (BWS) filtration system. The final discharge consists of combined BWS effluent and the excess groundwater flows. The facility generates the excess groundwater from maintaining a cone of depression for onsite remediation activities.

For the industrial wastewater treatment (IWT) system (outfall 002), treatment consists of oil water separation, lime addition and clarification, then multimedia filtration. At the IWT clarifier, the permittee operates the scum collection pump on a manual basis to reduce wear on the pump. During the inspection, the scum collection trough was full. Recommended that the facility could put the pump on a timer to ensure the scum is removed on a regular basis.

In the previous permit, the permittee monitored Spokane River intake water, outfalls 002 and 003, the influent of the BWS treatment system, and the final discharge to the river. The reissued permit requires monitoring at the river intake, outfalls 001 (final discharge to the river), 002, 003, 006 (new outfall for BWS effluent), and BWS influent. Similar to monitoring at the final outfall, the permittee will sample the BWS effluent by withdrawing a small continuous effluent stream from the outflow pipe, routing this flow into a small overflow tank. An automatic composite sampler (driven by a vacuum pump) will sample from this overflow tank. For the BWS influent, the line runs directly into the inlet pump vault. The permittee will use containers lined with teflon bags to collect the samples.

The permittee plans to conduct further PCB source identification work in the collection system generally draining the south portion of the plant (outfall 004). The work will focus on identifying the mass loading of PCBs within the collection system to target further PCB removal efforts. The permittee will estimate flows via dye injection/testing and measure PCB concentrations using semipermeable membrane devices.

**Records/Reports:** The attached tables list a discharge monitoring report summary from January 2009 to March, 2011. At outfall 002 (IWT plant), Kaiser rebuilt their secondary clarifier in the late summer/early fall of 2009. During the work, the facility bypassed the secondary clarifier, as authorized by Ecology under an administrative Order. As a result of the work, the facility exceeded permit limits for aluminum, TSS, and oil & grease during this time, but not those interim permit limits authorized via the bypass Order. In December, 2009, the daily maximum permit limit for aluminum was exceeded. For that

daily value, the facility initially measured a high aluminum concentration of 59.1 mg/L. The facility retested the effluent sample at 29.1 mg/L. The loading value was calculated from an average of these two concentrations, which resulted in the daily maximum limit exceedence.

For outfall 001, biological growth/interference on the continuous pH metering probe resulted in a number of apparent pH violations. The December, 2009 and May and December, 2010 pH exceedences fell within the time limit allowed for continuous pH readings (excursions between 5.0 and 6.0, or 9.0 and 10.0 are not considered violations as long as no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month). For the remainder of the pH exceedences, the Permittee documented that the continuously recorded pHs were incorrect. When the pH went outside of the permitted range, Kaiser personnel would take a measurement with a calibrated, hand held pH probe. In all of these instances, the continuous pH did not match the secondary pH measurements. At this point, the facility personnel would clean then recalibrate the continuous pH probe. The biological growth/fouling problem persisted over a number of months. To solve the problem, the permittee switched to an anti-microbial probe, increased the flow through the continuous pH monitoring tank (see attached photo), and used a screened basket around the probe (to prevent biological growth from attaching to the probe). These measures have apparently solved the problem.

In September, 2009, the permittee also exceeded the daily maximum limit for TSS, and monthly average and daily maximum limit for oil and grease at outfall 001. Both these results have likely been influenced by sampling procedures rather than reflecting actual discharge conditions. For oil and grease, the permittee had installed a vertical observation/sampling port into the main wastewater line. This opening had accumulated foam/oil & grease layer, which was collected during sampling. The permittee has abandoned this sampling method, and moved the location to a free flowing section of the effluent line. The permittee believes the high TSS result occurred when accumulated debris from the effluent sampling line became dislodged and sampled by the automatic compositor. Facility personnel then cleaned the line which removed additional debris.

Name(s) and Signatures of Inspector(s) Pat Hallinan	Agency/Office/Telephone WA Dept. of Ecology/Eastern Regional Office 4601 N. Monroe Street, Spokane, WA 99205-1295 (509) 329-3500	Date Jul. 18, 11
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers WA Dept. of Ecology/Eastern Regional Office rev's phone (509) 329-3514 fax # (509) 329-3570	Date

**ANNOUNCED** Inspection

**INSTRUCTIONS****Section A: National Data System Coding (i.e., PCS)**

**Column 1: Transaction Code.** Use N, C, or D for New Change or Delete. All inspections will be new unless there is an error in the data entered.

**Columns 3-11: NPDES Permit No.** Enter the facility's NPDES permit number. *(Use the Remarks columns to record State permit number, if necessary.)*

**Columns 12-17: Inspection Date.** Insert the date entry was made into the facility. Use the year/month/day format (e.g., 94/06/30 = June 30, 1994).

**Column 18: Inspection Type.** Use one of the codes listed below to describe the type of inspection:

A Performance Audit	L Enforcement Case Support	2 IU Sampling Inspection
B Compliance Biomonitoring	M Multimedia	3 IU Non-Sampling Inspection
C Compliance Evaluation (non-sampling)	P Pretreatment Compliance Inspection	4 IU Toxics Inspection
D Diagnostic	R Reconnaissance	5 IU Sampling Inspection with Pretreatment
E Corps of Engineers Inspection	S Compliance Sampling	6 IU Non-Sampling Inspection with pretreatment
F Pretreatment Follow-up	U IU Inspection with Pretreatment Audit	7 IU Toxics with Pretreatment
G Pretreatment Audit	X Toxics Inspection	
I Industrial User (IU) Inspection	Z Sludge	

**Column 19: Inspector Code.** Use one of the codes listed below to describe the *lead agency* in the inspection.

C - Contractor or Other Inspectors ( <i>Specify in Remarks Columns</i> )	N - NEIC Inspectors
E - Corps of Engineers	R - EPA Regional Inspector
J - Joint EPA/State Inspectors - EPA Lead	S - State Inspector
	T - Joint State/EPA Inspectors - State Lead

**Column 20: Facility Type.** Use one of the codes below to describe the facility.

- 1 - Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
- 2 - Industrial. Other than municipal, agricultural, and Federal facilities.
- 3 - Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
- 4 - Federal. Facilities identified as Federal by the EPA Regional Office

**Columns 21-66: Remarks.** These columns are reserved for remarks at the discretion of the Region.

**Columns 67-69: Inspection Work Days.** Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

**Column 70: Facility Evaluation Rating.** Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

**Column 71: Biomonitoring Information.** Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

**Column 72: Quality Assurance Data Inspection.** Enter Q if the inspection was conducted as follow-up on quality assurance sample results. Enter N otherwise.

**Columns 73-80:** These columns are reserved for regionally defined information.

**Section B: Facility Data**

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, and other updates to the record).

**Section C: Areas Evaluated During Inspection**

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection. The heading marked "Multimedia" may indicate medias such as CAA, RCRA, and TSCA. The heading marked "Other" may indicate activities such as SPCC, BMPs, and concerns that are not covered elsewhere.

**Section D: Summary of Findings/Comments**

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.