



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

January 23, 2018

The Honorable Carolyn Emerson-Farr
Town of Albion
PO Box 38
Albion, WA 99102-0038

RE: Albion Wastewater Treatment Plant - NPDES Permit No. WA0022608
Compliance Inspection November 29, 2017

Dear Mayor Emerson-Farr:

I met with Ken Smith to complete a compliance inspection for the permitted wastewater treatment facility. Ken is doing a great job of operating the facility. However, the Town of Albion (Town) is in violation of the numerical limits in the permit on a regular basis.

Some of these violations result from the ongoing infiltration and inflow issues; others result from the use of a facultative lagoon system to meet discharge limits to surface water.

The new permit for the facility will soon be in development. I recommend that we meet this spring to discuss the violations and what the new permit will require as a result of the PCB TMDL for the South Fork of the Palouse River, as well as the Town's violation history. In the interim, please address the following:

- Inspect the outfall pipe and verify that the flap valve is in place and functional.

The inspection report is enclosed. If you have any questions regarding the inspection report, please contact me at (509) 329-3519 or dwas461@ecy.wa.gov.

Regards,

Diana Washington, P.E.
Senior Engineer
Water Quality Program

DW:red

Enclosure: Compliance Inspection Report
cc: Ken Smith, Wastewater Treatment Plant Operator



State of Washington Department of Ecology
Eastern Regional Office
Water Compliance Inspection Report

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

Transaction Code 1 N 2 5	NPDES # 3 WA-0022608 11	yr/mo/day 12 17/11/29 17	Inspection Type 18 C	Inspector 19 S	Fac Type 20 1
Remarks 21 _____ 66					
Inspection Work Days 67 1 69	Facility Self-Monitoring Evaluation Rating 70 5	BI 71 N	QA 72 N	-----Reserved----- 73 _____ 74 _____ 75 _____ 80	

Section B: Facility Data

Name and Location of Facility Inspected (<i>For industrial users discharging to POTW, also include POTW name and NPDES permit number</i>) Albion STP West of town along the South Fork Palouse River Along Shawnee-Parvin Rd	Entry Time/Date 7:45 AM 11/29/2017	Permit Effective Date 7/01/2010
	Exit Time / Date 11:00 AM 11/29/2017	Permit Expiration Date 6/30/2015
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Ken Smith Operator 509-336-4555	Other Facility Data (e.g. SIC NAICS, and other descriptive information) Facultative Lagoons with Chlorine Disinfection	
Name, Address of Responsible Official/Title/Phone and Fax Number Mayor Carolyn Emerson-Farr PO Box 38 Albion WA 99102-0038 509-336-4555		
Contacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

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


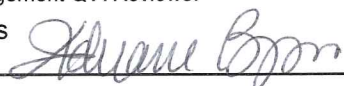
<input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Self-Monitoring Program	<input type="checkbox"/> Pretreatment	<input type="checkbox"/> MS4
<input checked="" type="checkbox"/> Records/Reports	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Pollution Prevention	<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> Facility Site Review	<input checked="" type="checkbox"/> Laboratory	<input type="checkbox"/> Stormwater	
<input checked="" type="checkbox"/> Effluent/Receiving Water	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow	
<input checked="" type="checkbox"/> Flow Measurement	<input type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

I met Ken Smith, the community's wastewater treatment plant operator, at the town hall at 7:45 AM. I reviewed all the documentation including an example of the operator log, O&M, permit, and lab results. We discussed the violations history at the facility. The facility has had ongoing issues achieving compliance with pH, total suspended solids (TSS), and biochemical oxygen demand (BOD5). In addition to these issues, influent flow was violated during months with high precipitation. Ken reported that the community continues to make improvements to the collection system every year.

Ken said that the community has 83 manholes and several hundred feet of pipe that contribute inflow and infiltration (I&I) to the wastewater treatment facility. They have five manholes in the floodplain (Photo 1). The floodplain manholes have a liner on the outside to prevent inflow and inflow protectors installed under the lids. They have lined 18 of the manholes with seals including the five located in the floodplain. The Town still has significant I&I issues which resulted in several flow violations from January 2017- April 2017

Name(s) and Signatures of Inspector(s) Diana Washington P.E. 	Agency/Office/Phone and Fax Numbers Ecology/Spokane/509-329-3519	Date 1/23/2018
Signature of Management Q A Reviewer Adriane Borgias 	Agency/Office/Phone and Fax Numbers Ecology/Spokane/509-329-3515	Date 1/23/2018

Water Compliance Inspection Report
Section D. Summary of Findings/Comments (continued)

Ken provided a site tour and inspection of the treatment system.

The tour started at the influent where we discussed the grinder pumps. The facility was not required to install screens during the 2012 upgrade. The influent from the lift station flows to the distribution box. The manual 24-hour composite influent samples are taken at this location. Due to the lack of screening and grinding of all solids, the biosolids may have to be screened prior to land application to meet the inert solids limits. It may be several years before they have to deal with this. Solids tend to build up very slowly in facultative lagoons.

The distribution box allows the operator to direct the flow as needed to accommodate maintenance of the lagoons. The typical operations is for the influent to flow via gravity from the distribution box to Lagoon 1 then via gravity from Lagoon 1 to Lagoon 2 (Photo 11). The pump are cycled and controlled using PLC. The system has an alarm with auto dialer and back-up batteries.

During the discharge season the effluent is chlorinated and dechlorinated prior to discharge to the South Fork of the Palouse River. They were not discharging during the site visit. They do not have clean water available at the facility. They use wastewater to run the chlorination system and river water to run the dechlorination system. The operator takes effluent chlorine, sulfate, and pH samples at the V-notch weir every morning, five days per week.

During the discharge season they collect 24-hour manual composite samples for biochemical oxygen demand, total suspended solids, ammonia, and fecal coliforms. They send the samples to Anatek Labs for analysis.

Photo 19 shows the outfall pipe to the South Fork Palouse River. The check valve is not visible in this photo. According to the information provided, they repaired the flap valve in 2015 as a requirement of the last inspection. They need to verify the flap valve is in place and working correctly.

The last inspection indicated that they did not have an accurate DMR cut and paste spreadsheet. They said that they would wait until the new permit was issued. This will take some time yet so I will recommend that a new one be sent to them.

Overall, it appears that Ken is doing a great job of operating the facility as designed. Until the community resolves the I&I issues and upgrades treatment to meet the discharge limits for BOD, TSS, and pH, they will have ongoing violations. The permit that is in development will require steps to meet the water quality-based effluent limits that are now required for the facility's discharge.

Description	Photographs	Image Name
Manhole seal installation.	 <p>Photo provided by Ken Smith, Operator</p>	Photo 1

Pump control panel

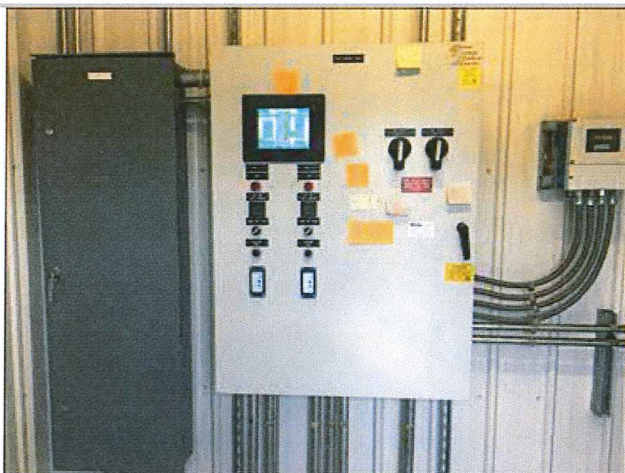


Photo 2

Operational alarm with auto dialer

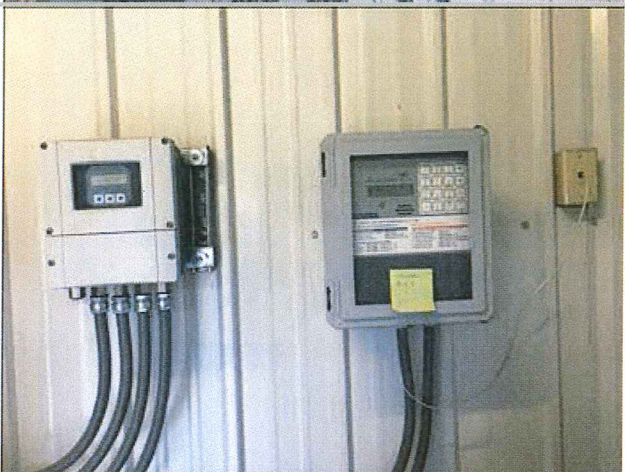


Photo 3

Allen Bradley PLC

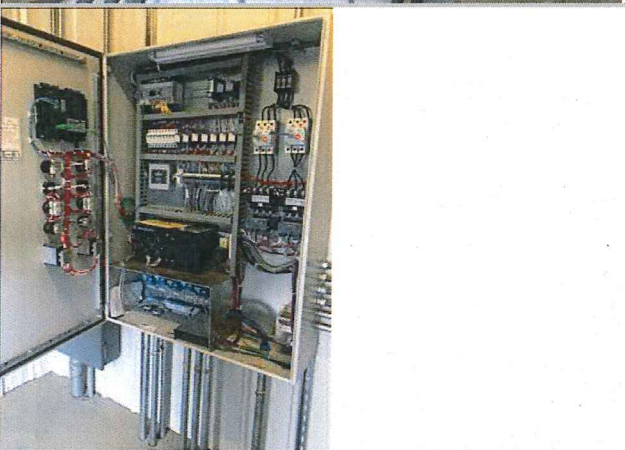


Photo 4

Flow schematic and colorimetric conversion table for Chlorine tests.

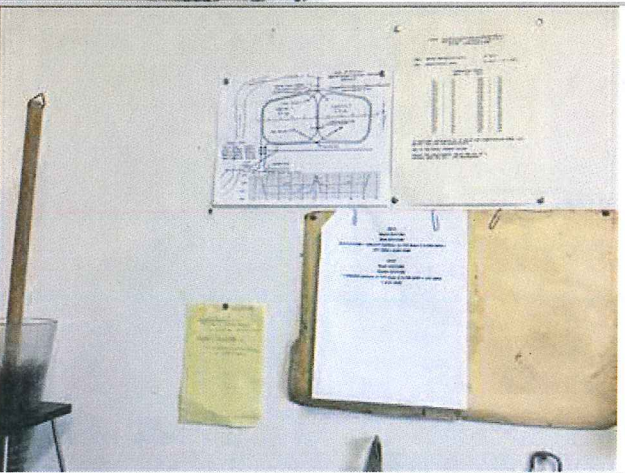


Photo 5

Lab for testing chorine, pH,
and refrigerator for samples.

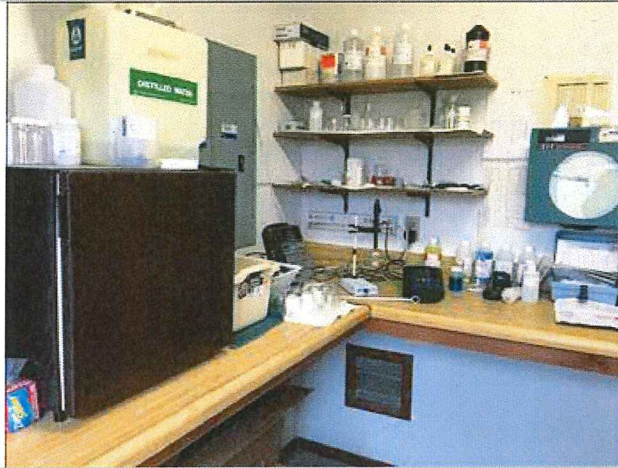


Photo 6

Bench test log and settling test
equipment.

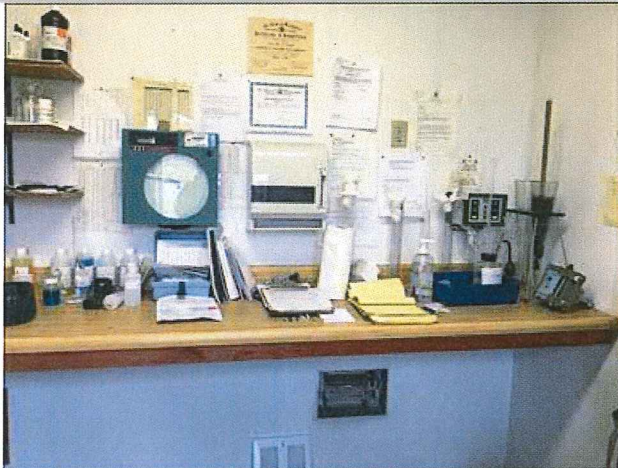


Photo 7

Influent manhole prior to the
lift station.



Photo 8

Influent manhole prior to the
lift station.



Photo 9

Influent lift pump with grinder and screen.



Photo 10

Facultative lagoons Cell 1 and 2

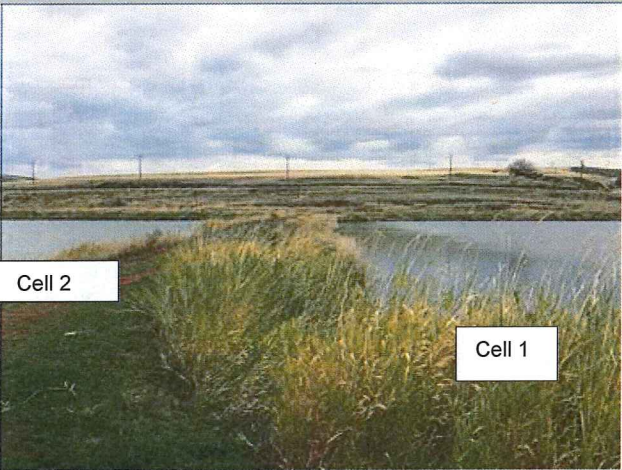


Photo 11

Lagoon Cell 1



Photo 12

Lagoon Cell 2



Photo 13

Wastewater is pumped through and chlorine gas is added; water then flows back into contact basin.

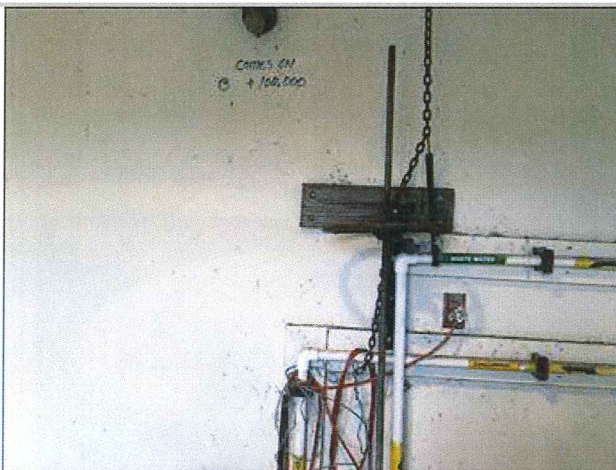


Photo 14

Chlorine gas addition



Photo 15

SO2 gas added to chlorinated wastewater to dechlorinate.

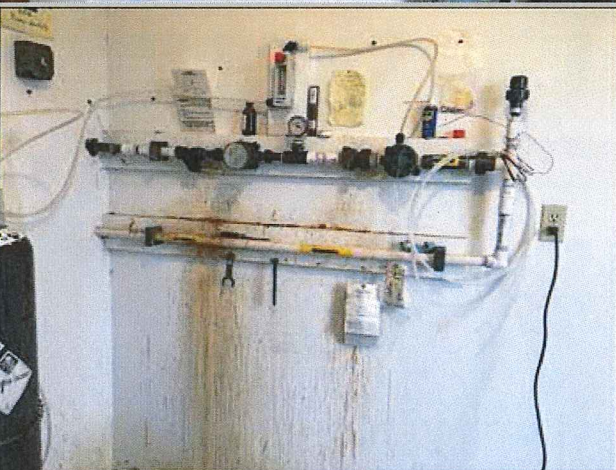


Photo 16

Chlorine is added to the discharge pit.



Photo 17

V-notch weir where effluent samples are collected.



Photo 18

Bank effluent pipe



Photo 19

Bank effluent pipe discharges to the South Fork Palouse River.



Photo 20

Section D: COMPLETED BY: Diana Washington P.E.

TITLE: Senior Engineer/Permit Manager

DATE: 1/16/2018

TELEPHONE: 509-329-3519

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.

Column 3 - 11: NPDES Permit No.: Enter the facility's NPDES permit number – third character in permit number indicates permit type for U=unpermitted, G=general permit, etc.. (Use the Remarks columns to record the 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	U	IU Inspection with Pretreatment Audit	!	Pretreatment Compliance (Oversight)
B	Compliance Biomonitoring	X	Toxics Inspection	@	Follow-up (enforcement)
C	Compliance Evaluation (non-sampling)	Z	Sludge – Biosolids	{	Stormwater-Construction-Sampling
D	Diagnostic	#	Combined Sewer Overflow-Sampling	}	Stormwater-Construction-Non-Sampling
F	Pretreatment Follow-up	\$	Combined Sewer Overflow-Non-Sampling	:	Stormwater-Non-Construction-Sampling
G	Pretreatment (Audit)	+	Sanitary Sewer Overflow-Sampling	~	Stormwater-Non-Construction-Non-Sampling
I	Industrial User (IU) Inspection	&	Sanitary Sewer Overflow-Non-Sampling	<	Stormwater-MS4-Sampling
M	Multimedia	\	CAFO-Sampling	-	Stormwater-MS4-Non-Sampling
N	Spill	=	CAFO-Non-Sampling	>	Stormwater-MS4-Audit
O	Compliance Evaluation (Oversight)	2	IU Sampling Inspection		
P	Pretreatment Compliance Inspection	3	IU Non-Sampling Inspection		
R	Reconnaissance	4	IU Toxics Inspections		
S	Compliance Sampling	5	IU Sampling Inspection With Pretreatment		
		6	IU Non-Sampling Inspection with Pretreatment		
		7	IU Toxics With Pretreatment		

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

A - State (Contractor)	O - Other Inspectors, Federal/EPA (Specify in Remarks columns)
B - EPA (Contractor)	P - Other Inspectors, State (Specify in Remarks columns)
E - Corps of Engineers	R - EPA Regional Inspector
J - Joint EPA/State Inspectors-EPA Lead	S - State Inspector
L - Local Health Department (State)	T - Joint State/EPA Inspectors-State Lead
N - NEIC Inspectors	

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.
- 5 - Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389

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 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.

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.

*Footnote: In addition to the inspection types listed above under column 18, a state may continue to use the following wet weather and CAFO inspection types until the state is brought into ICIS-NPDES: K-CAFO, V-SSO, Y-COS, W-Stormwater, 9-MS4. States may also use the new wet weather CAFO and MS4 inspection types show in column 19 of this form. The EPA regions are required to use the new wet weather CAFO and MS4 inspection types for inspections with an inspection date (DTIN) on or after July 1, 2005.

Attachment - Single Event Violation Table - Codes and Descriptions*

CODE	DESCRIPTION
Effluent Violations	
A0018	Approved Bypass
A0013	Failed Toxicity Test
A0023	Industrial Spill
A0017	Inspection sample above historic DMR range
A0022	Narrative Effluent Violation
A0012	Numeric effluent violation
A0016	Reported Fish Kill
A0011	Unapproved Bypass
A0015	Unauthorized Discharge of Brine
Management Practice Violations	
B0019	Best Management Practice Deficiencies
B0024	Biosolids/Sewage Sludge Violation (Part 503)
B0026	Failure to Allow Entry
B0012	Failure to Conduct Inspections
B0027	Failure to Develop Adequate SPCC Plan
B0017	Failure to develop any or adequate SWPPP/SWMP
B0011	Failure to Develop/Enforce Standards
B0028	Failure to Implement SPCC Plan
B0018	Failure to Implement SWPPP/SWMP
B0041	Failure to Maintain Records
B0040	Improper Chemical Handling
B0023	Improper Land Application (non-503, non-CAFO)
B0020	Improper Operation and Maintenance
B0025	Inflow/Infiltration (I/I)
B0021	Laboratory Not Certified
B0022	No Licensed/Certified Operator
B0042	Violation of a milestone in an order
Monitoring Violations	
C0017	Analysis not Conducted
C0011	Failure to Monitor for non-Toxicity Requirements

CODE	DESCRIPTION
CSO	
A0C18	Approved Bypass
A0024	Dry weather overflow
B0030	Failure to Develop Adequate LTCP
B0031	Failure to Implement LTCP
B0029	Failure to Implement Nine Minimum Controls (NMCs)
BC291	Failure to implement required NMC #1 (Proper operation and maintenance)
BC292	Failure to implement required NMC #2 (Maximum use of the collection system)
BC293	Failure to implement required NMC #3 (Review pretreatment requirements)
BC294	Failure to implement required NMC #4 (Maximization of flow)
BC295	Failure to implement required NMC #5 (Elimination of dry weather flow)
BC296	Failure to implement required NMC #6 (Control of solids)
BC297	Failure to implement required NMC #7 (Pollution prevention programs)
BC298	Failure to implement required NMC #8 (Public notification)
BC299	Failure to implement required NMC #9 (Monitoring)
B0C41	Failure to Maintain Records or Meet Record Keeping Requirements
C0C11	Failure to monitor
E0C16	Failure to submit required report (non-DMR)
E0C13	Improper/Incorrect reporting
B0044	LTCP implementation schedule milestone missed
A0C22	Narrative effluent violation
E0C14	Noncompliance with section 308 Information Request
A0C12	Numeric effluent violation
A0C11	Related Unapproved Bypass
A0021	Unauthorized CSO Discharge to Waters/Wet Weather
A0025	Unauthorized overflow to dry land or building backup
B0045	Violation of a milestone in a permit
B0C42	Violation of a milestone in an order
SSO	
A0S18	Approved Bypass
A0020	Discharge to Waters

CODE	DESCRIPTION
C0021	Failure to Monitor for Toxicity Requirements
C0015	Frequency of Sampling Violation
C0018	Improper Analysis or Lab Error
C0014	Invalid/Unrepresentative Sample
C0016	No Flow Measurement Device
Permitting Violations	
D0014	Application Incomplete
D0011	Discharge Without a Valid Permit
D0012	Failure to Apply for a Permit
D0015	Failure to Pay Fees
D0016	Failure to Submit Timely Permit Renewal Application
D0013	Unapproved Operation
D0017	Violation Specified in Comment

Reporting Violations	
E0017	Failure to Notify
E0012	Failure to Submit DMRs
E0016	Failure to submit required report (non-DMR, non-pretreatment)
E0013	Improper/ Incorrect Reporting
E0011	Late Submittal of DMRs
E0014	Noncompliance with Section 308 Information Request
Pretreatment	
C0012	Baseline Monitoring Report Violation
B0P12	Failure to Conduct Inspections
B0P11	Failure to Develop/Enforce Standards
B0013	Failure to Enforce Against I/U
B0015	Failure to Establish Local Limits
C0013	Failure to Establish Self-Monitoring Requirements
B0014	Failure to Issue SIU Permits
B0016	Failure to Meet Inspection and Sampling Plan for SIUs
E0015	Failure to submit required report (non-DMR)
B0P40	Improper Chemical Handling

CODE	DESCRIPTION
D0S11	Discharge without a valid permit (includes satellite systems)
B0S41	Failure to Maintain Records or Meet Record Keeping Requirements
C0S11	Failure to monitor
E0018	Failure to report other violation
E0019	Failure to report violation that may endanger public health 122.41(l)(7)
D0S12	Failure to submit required permit application info (includes satellite systems)
B0S20	Improper Operation and Maintenance
A0S22	Narrative effluent violation
E0S14	Noncompliance with section 308 Information Request
A0S12	Numeric effluent violation
A0026	Overflow to Dry Land or Building Backup
A0S11	Related Unapproved Bypass
BS42A	Violation of milestone in an administrative order
BS42J	Violation of milestone in judicial decree
B0046	Violation of sewer moratorium or restriction
Stormwater Construction	
D0R11	Discharge without a permit
D0R18	Failure to apply for a notice of termination
B0R12	Failure to Conduct Inspections
B0C17	Failure to develop any or adequate SWPPP/SWMP
B0C18	Failure to Implement SWPPP/SWMP
B0R41	Failure to Maintain Records
C0R11	Failure to Monitor
BR19A	Failure to properly install/implement BMPs
BR19B	Failure to properly operate and maintain BMPs
D0R12	Failure to submit required permit application information
E0R16	Failure to submit required report (non-DMR)
A0R22	Narrative effluent violation
E0R14	Noncompliance with section 308 Information Request
A0R12	Numeric Effluent Violation
B0R42	Violation of a milestone in an order
Stormwater MS4	
D0M11	Discharge without a permit

CODE	DESCRIPTION
A0014	IU Violation of Pretreatment Standards
CAFO	
B0A19	Best Management Practice Deficiencies
B0038	Direct Animal Contact with Waters of US
D0A11	Discharge without a permit
B0A12	Failure to Conduct Inspections
B0032	Failure to Develop any or adequate NMP
B0033	Failure to Implement NMP
B0A41	Failure to Maintain Records or Meet Record Keeping Requirements
B0043	Failure to meet order final compliance date
C0A11	Failure to Monitor
D0A12	Failure to submit required permit application information
C0019	Failure to Test Manure
B0A40	Improper Chemical Handling
B0A23	Improper Land Application
B0039	Improper Manure Handling (not including land application)
B0037	Improper Mortality Management
B0036	Improper O&M of Storage Facility
E0A13	Improper/Incorrect reporting
B0034	Insufficient Buffers/Setbacks
B0035	Insufficient Storage Capacity
A0A22	Narrative effluent violation
E0A16	No Annual Report Submitted
C0020	No Depth Marker
E0A14	Noncompliance with section 308 Information Request
A0A12	Numeric effluent violation
A0019	Production Area Runoff
B0A42	Violation of a milestone in an order

CODE	DESCRIPTION
D0M18	Failure to apply for a notice of termination
B0M12	Failure to Conduct Inspections
B0M17	Failure to develop any or adequate SWPPP/SWMP
B0M18	Failure to Implement SWPPP/SWMP
B0M41	Failure to Maintain Records or Meet Record Keeping
C0M11	Failure to Monitor
BM19A	Failure to properly install/implement BMPs
BM19B	Failure to properly operate and maintain BMPs
D0M12	Failure to submit required permit application information
E0M16	Failure to submit required report (non-DMR)
A0M22	Narrative effluent violation
E0M14	Noncompliance with section 308 Information Request
A0M12	Numeric Effluent Violation
B0M42	Violation of a milestone in an order
Stormwater Non-Construction	
D0N11	Discharge without a permit
D0N18	Failure to apply for a notice of termination
B0N12	Failure to Conduct Inspections
B0N17	Failure to develop any or adequate SWPPP/SWMP
B0N18	Failure to Implement SWPPP/SWMP
B0N41	Failure to Maintain Records
C0N11	Failure to Monitor
BN19A	Failure to properly install/implement BMPs
BN19B	Failure to properly operate and maintain BMPs
D0N12	Failure to submit required permit application information
E0N16	Failure to submit required report (non-DMR)
A0N22	Narrative effluent violation
E0N14	Noncompliance with section 308 Information Request
A0N12	Numeric Effluent Violation
B0N42	Violation of a milestone in an order

* N. B. The codes and code names listed herein may change over time. Please consult ICIS-NPDES and PCS system documentation for updated lists.

