

II. BACKGROUND

Except as otherwise noted, the facts in this section are those alleged in plaintiffs' complaint¹ which were not denied in defendant's answer.² Plaintiffs are residents of the village of Kivalina located near the mouth of the Wulik River in northwestern Alaska. The Wulik River is the primary source of drinking water for Kivalina residents. Plaintiffs harvest fish from the Wulik River and its tributaries. Some of the plaintiffs also harvest fish and marine mammals from the waters of the Chuckchi Sea near where the river empties into the sea.

Defendant Teck operates the Red Dog Mine, which is located about fifty-five miles from the Chuckchi Sea on land owned by the Northwest Arctic Native Association ("NANA"). Ore removed from the open pit mine is milled to obtain zinc and lead concentrates. Throughout the year, the concentrates are trucked over the DeLong Mountain Road to storage buildings about a mile from tidewater. During the months when the Chuckchi Sea is free of ice, the concentrates are loaded aboard ships for transport to smelters outside Alaska. The tidewater storage facilities and other infrastructure at the port site are on NANA land. Teck operates the mine and the port sites under an agreement with NANA.

Cyanide is used in the milling process at the mine. Tailings and process wastewater resulting from the milling operation are impounded in a tailings pond, from which treated wastewater is discharged into the Middle Fork of Red Dog Creek through Outfall 001. Mining takes place year-round, but wastewater is discharged only during the warmer periods, generally from May until early October.

Federal law prohibits discharge of pollutants from point sources except in compliance with the provisions of the Clean Water Act.³ The discharge of pollutants

¹Doc. 10.

²Doc. 6.

³33 U.S.C. § 1311(a). Section 1 of Pub. L. 95-217 indicates that a set of federal water pollution control statutes - statutes that include those of great relevance to this litigation - may be cited as the "Clean Water Act of 1977." For simplicity and because there have been subsequent amendments, the court uses the term "Clean Water Act" to refer to this statutory

may be authorized in compliance with National Pollution Discharge Elimination System (“NPDES”) permits.⁴ In Alaska, NPDES permits are issued by the federal Environmental Protection Agency (“EPA”). EPA issued NPDES permit number AK-03865-2 for the mine site in 1985, reissued the permit in 1998, modified the permit in July 2003, and administratively extended it when the permit expired on August 28, 2003. The permit authorizes Teck to discharge 2.418 billion gallons of effluent from the tailings pond via Outfall 001 each year. Eleven discharge parameters are found in the permit which uses two limitation types—daily maximum discharge limits and monthly average discharge limits. The permit also sets limits for total dissolved solids (“TDS”) in the mine’s discharge.

EPA issued the current NPDES permit number AK004064-9 for the port site with an effective date of January 29, 1999. The permit authorizes Teck to discharge treated wastewater from a sewage treatment plant into the Chuckchi Sea via Outfall 001, and to discharge drainage from the concentrate storage buildings into the Chuckchi Sea or onto the tundra from Outfall 005.

Plaintiffs’ complaint alleges ten claims. The third, sixth, ninth, and tenth claims, which allege violations of 33 U.S.C. § 1311(a), are pertinent to the motions presented herein. The third claim asserts violations of Whole Effluent Toxicity (“WET”) testing requirements set forth in the mine site NPDES permit. The sixth claim alleges self-monitoring and reporting violations of the mine site NPDES permit. The ninth claim asserts self-monitoring and reporting violations of the port site NPDES permit. The tenth claim alleges that Teck violated the monitoring and reporting requirements of the Mine Consent Order issued by the EPA on July 1, 1999, and modified on May 17, 2002. The Mine Consent Order requires Teck to measure its compliance with TDS discharge limits and to “monitor for certain parameters at the mine site and in streams near the mine site, as well as report certain data and calculations.”⁵

scheme.

⁴33 U.S.C. § 1342(a).

⁵Revised Complaint at 26, doc. 26.

III. SUMMARY JUDGMENT STANDARD

Federal Rule of Civil Procedure 56(c) provides that summary judgment should be granted when there is no genuine issue as to any material fact and when the moving party is entitled to judgment as a matter of law. The moving party has the burden to show that material facts are not genuinely disputed.⁶ To meet this burden, the moving party must point out the lack of evidence supporting the nonmoving party's claim, but need not produce evidence negating that claim.⁷ Once the moving party meets its burden, the nonmoving party must demonstrate that a genuine issue of fact exists by presenting evidence indicating that certain facts are disputed so that a fact-finder must resolve the dispute at trial.⁸

IV. DISCUSSION

Defendant moves for summary judgment dismissing a portion of plaintiffs' claims relating to monitoring and reporting violations. Defendant argues that some of the alleged violations do not constitute actual violations of the requirements of the NPDES permits or the Mine Consent Order. Defendant further argues that some of the alleged violations are wholly in the past and thus "[p]laintiffs have no standing to assert those claims and this court does not have jurisdiction to hear them."⁹

Plaintiffs cross-move for summary judgment on "359 of the monitoring and reporting violations in their Revised Complaint: the 273 that [Teck] asserts are not violations but which demonstrably are, the 73 which [Teck] admits in its Motion, and 13 additional violations which [Teck] has admitted in its Answer here or in the [Kivalina Relocation Planning Committee ("KRPC")] litigation."¹⁰ However, plaintiffs acknowledge

⁶*Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986).

⁷*Id.* at 325.

⁸*Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248-49 (1986).

⁹Defendant's Motion at 2, doc. 44.

¹⁰Plaintiffs' Opposition and Cross-Motion at 1, doc. 54.

that discovery established that thirteen other alleged violations were not violations, so plaintiffs concede that their claims as to those alleged violations should be dismissed.¹¹

The court's discussion of the parties' cross-motions for partial summary judgment is organized into three sections: Section One addresses the monitoring and reporting violations which defendant denies, Section Two addresses the violations that defendant argues are wholly in the past, and Section Three addresses the monitoring and reporting violations defendant has admitted in this action or in the KRPC action.

Section One

Defendant moves the court to enter summary judgment on the monitoring and reporting violations discussed in this section on the grounds that the alleged violations did not occur. Plaintiffs have agreed to the dismissal of some of the alleged violations and cross-move for summary judgment on the remaining violations. The court considers each alleged violation in turn.

A. Organic Priority Pollutant Scan in June 2000

Paragraph 118 of plaintiffs' sixth claim alleges that Teck violated condition I(A)(1) of its mine site NPDES permit by failing to take a sample for Organic Priority Pollutant Scan ("OPPS") in June 2000. Plaintiffs concede that the alleged June 2000 violation concerning OPS should be, and it is hereby, dismissed.¹²

B. Composite Sample for Turbidity on July 22, 2000

Paragraph 118 of plaintiffs' sixth claim alleges that Teck violated condition I(A)(1) of its mine site NPDES permit by failing to collect a 24-hour composite sample for turbidity on July 22, 2000. Defendant alleges that it typically measures turbidity using a 24-hour composite sample, but that on July 22, 2000, it determined turbidity based on data from the mill and that the "turbidity data from the mill provides the same information that would have been obtained from a 24-hour composite sample."¹³

¹¹*Id.* at pp. 21-22. Each of the thirteen is identified in the text below.

¹²*Id.*

¹³Motion at 7-8, doc. 44.

Plaintiffs argue that, because there are genuine issues of material fact as to whether the testing method defendant employed is equivalent to that required by the permit, this violation should be resolved at trial. The court agrees with plaintiffs. The parties' cross-motions for summary judgment are denied as to this claim.

C. Monitoring of Metals in Sulphur Creek in November 2002

Paragraph 124 of plaintiffs' sixth claim alleges that Teck violated condition I(D)(3) of its mine site NPDES permit in November 2002 when it failed to report aluminum, cadmium, chromium, copper, iron, lead, manganese, nickel, and zinc monitoring results for the Sulfur Creek ambient monitoring station. In their opposition, plaintiffs concede that the nine alleged November 2002 violations for failing to report metals monitoring results should be dismissed. Accordingly, they are dismissed.¹⁴

D. Monitoring of Stream Flows at Stations 2, 8, 9, 10, 12, and 140 in October 2002, November 2002, and May 2003

Paragraph 127 of plaintiffs' sixth claim alleges that Teck violated condition I(D)(8) of its mine site NPDES permit 264 times by failing to report daily stream flows at Stations 2, 8, 9, 10, 12, and 140 in October 2002, November 2002, and May 2003. Condition I(D)(8) requires streamflow to be determined on a daily basis at Stations 2, 8, 9, 10, 12, and 140, using standard methods recognized by the United States Geological Survey ("USGS"), including measuring discharge and "estimating using all available information."¹⁵ Condition I(D)(8) also requires Teck to report the streamflow data and the methods used to determine streamflow in its monthly discharge monitoring report ("DMR") to the EPA.

It is undisputed that Teck used estimates to determine daily streamflow for most of the months at issue and did not timely report daily streamflows at Stations 2, 8, 9, 10, 12, and 140 in its monthly DMRs for October 2002, November 2002, and May 2003. However, defendant argues that it did not violate permit condition I(D)(8) because for "[m]uch of the time, it was [] not possible to take discharge measurements in October

¹⁴Opposition and Cross-Motion at 22, doc. 54.

¹⁵Motion at 9, doc. 44.

2002, November 2002 or May 2003 due to dangerous field conditions” and because there was ice in the channel.¹⁶ Consequently, defendant used estimates to determine streamflow. Defendant further alleges that the “USGS data was not available until well- after the October and November 2002 and May 2003 DMRs were required to be submitted so revised DMRs for those months were submitted with the estimated flow report.”¹⁷

Based on the record before the court, it is unclear when Teck submitted the revised DMRs to the EPA, why the USGS data was not available earlier, and whether Teck’s acts of timely submitting a DMR explaining its inability to conduct streamflow testing, and then submitting revised DMRs once the estimates were available constituted a violation of condition I(D)(8). Because material questions of fact exist as to the alleged streamflow monitoring and reporting violations, the parties’ cross-motions for summary judgment are denied as to these alleged violations.

E. Sampling for Hardness and Copper at Outfall 001 in May 2002

Paragraph 148 of plaintiffs’ ninth claim alleges in part that Teck violated permit condition I(A)(1) of its port site NPDES permit in May 2002 by failing to monitor total hardness and copper at Outfall 001. Plaintiffs concede that alleged May 2002 violations concerning Teck’s alleged failure to monitor total hardness and copper should be dismissed, and so they are dismissed.¹⁸

F. Whole Effluent Toxicity Testing on *Mysidopsis bahia* and *Holmesmysis costata*

Paragraph 148 of plaintiffs’ ninth claim alleges that Teck violated condition III(A)(2)¹⁹ of its port site NPDES permit by failing to conduct Whole Effluent Toxicity

¹⁶*Id.* at 10.

¹⁷Declaration of Mark Thompson at 8, Exh. 1, doc. 44.

¹⁸Opposition and Cross-Motion at 22, doc. 54.

¹⁹Plaintiffs’ revised complaint erroneously refers to condition I(A)(1) of the port NPDES permit. However, it is undisputed that condition III(A)(2) of the port NPDES permit is the applicable provision.

("WET") tests on *Mysidopsis bahia* and *Holmesmysis costata* in July 2002, August 2002, and September 2002. Condition III(A)(2) provides:

The Permittee shall conduct one acute toxicity test per month (per fish and invertebrate specie) during the months of June, July, August and September. The testing shall occur by the third year following the effective date of the permit.²⁰

Defendant argues that the plain language of condition III(A)(2) only requires Teck to conduct one toxicity test per month during the months of June, July, August, and September "by the third year following the effective date of the permit." Because the effective date of the permit was January 29, 1999, and Teck completed and reported WET tests for mysids in June, July, August, and September of 2001, Teck argues that it fully complied with condition III(A)(2). In support of its interpretation, defendant filed an undated EPA fact sheet, which states in pertinent part:

Because of the deep outfall within the Chukchi Sea and available dilution, acute testing is more protective of the 1.0 chronic toxicity unit (TU) than chronic testing... Therefore, the draft permit requires completion of acute WET testing by the third year of the effective date of the permit. Testing (for that one year) during the months of June, July, August, and September shall be for acute toxicity.²¹

This is a consistent and convincing explanation of why the testing would only be required during one year. The agency chose an acute test rather than a chronic test, because of the anticipated (and presumably unchanging) effect of locating the outfall in a deep offshore location.

Plaintiffs argue that the plain language of condition III(A)(2) "implies a pattern of regular testing on an annual basis, as with every other permit parameter."²² Plaintiffs further allege that the phrase "by the third year" gives defendant a grace period to start the testing program, but requires that once started, testing must be conducted annually. In fact, the permit language establishing the requirement is consistent with Teck's

²⁰Permit No. AK-004064-9 at 11, exh. 2, doc. 44.

²¹Fact Sheet at 22, exh. 2, doc. 61.

²²Plaintiffs' Reply at 5, doc. 70.

interpretation, but not plaintiffs' interpretation. The permit says that the testing "shall **occur** by the third year following the effective date of the permit."²³ Had the permit been intended to require on-going annual testing every year as contended by plaintiffs, it would have said that the testing "shall **commence** by the third year following the effective date of the permit."

The plain language of condition III(A)(2) suggests that Teck was required to conduct one acute toxicity test per month during the months of June, July, August, and September by the third year following the effective date of the permit. While plaintiffs argue that condition III(A)(2) requires annual toxicity testing during the months of June, July, August, and September, plaintiffs do not provide any evidentiary support for their competing interpretation of condition III(A)(2)'s language. Plaintiffs "cannot rely on the mere possibility of a factual dispute" as to the intent of the permit condition to avert summary judgment.²⁴ Plaintiffs do not dispute that Teck completed the acute WET testing for the months of June, July, August, and September by the third year following the effective date of the permit. Teck is entitled to summary judgment on the alleged violations based on failure to conduct WET tests on *Mysidopsis bahia* and *Holmesmysis costata* in July 2002, August 2002, and September 2002.

G. Sampling for Hardness at Outfall 005 in May 2000

Paragraph 151 of plaintiffs' ninth claim alleges that Teck violated condition I(B)(5) of its port site permit in May 2000 by failing to monitor the discharge from Outfall 005 for hardness. Plaintiffs concede the alleged May 2000 violation concerning defendant's failure to monitor for hardness cannot be supported, and their claim as to this alleged violation is dismissed.²⁵

²³Exh. 12 to Declaration of Luke Cole attached to Opposition and Cross-Motion, doc. 54.

²⁴*National Union Fire Ins. Co. of Pittsburgh v. Argonaut Ins. Co.*, 701 F.2d 95, 97 (9th Cir. 19983).

²⁵Opposition and Cross-Motion at 22, doc. 54.

H. WET Monitoring for Station 9 in July, August, and October of 2002

Paragraph 90 of plaintiffs' third claim alleges in part that Teck violated condition I(H)(4) of its mine site NPDES permit by not reporting results of WET testing for Station 9 in July, August, and October of 2002. In their opposition, plaintiffs specifically allege that defendant violated condition I(H)(4) by not taking three "aliquots," or water samples, at Station 9 in July, August, and October of 2002. Defendant acknowledges that it used only one aliquot for ambient water testing at Station 9 in July, August, and October of 2002, but argues that testing with less than three aliquots is sufficient to satisfy the WET testing requirements. Condition I(H)(4) does not contain the word "aliquot," nor does it specify the number of samples which must be taken.

In support of their argument that material questions of fact exist as to the number of aliquots required by condition I(H)(4), plaintiffs offer evidence that James Kulas, Teck's environmental supervisor at the mine site, testified in an earlier deposition that three aliquots were required and in a subsequent deposition that only one aliquot was required. In light of the conflicting testimony, plaintiffs argue that the alleged violations should be resolved at trial.

Because material questions of fact exist as to how many aliquots, if any, are required to satisfy the WET testing requirements in condition I(H)(4), the court denies the parties' cross-motions for summary judgment as to the alleged violations of condition I(H)(4).

I. Monitoring for Total Dissolved Solids on July 14, 2000

Paragraph 162 of plaintiffs' tenth claim alleges that Teck violated the monitoring requirements of the Mine Consent Order on July 14, 2000. Defendant provides evidence that Teck "collected and recorded all the monitoring data on July 14, 2000 as required by the Consent Order," but was unable to transmit "due to intense solar flare activity."²⁶ Plaintiffs argue that even if Teck monitored for TDS on July 14, 2000, Teck failed to provide any evidence that the data was transmitted or reported to the EPA as required. Plaintiffs' argument goes more to the issue of whether Teck committed a

²⁶Declaration of Mark Thompson at 9, doc. 44.

reporting violation, not a monitoring violation. Because plaintiffs have failed to raise a genuine issue of material fact as to whether Teck committed a monitoring violation on July 14, 2000, defendant is entitled to summary judgment on plaintiffs' claim that Teck violated the monitoring requirements of the Mine Consent Order on July 14, 2000.

Section Two

Defendant argues that the court does not have jurisdiction over, and plaintiffs do not have standing to pursue, the monitoring and reporting claims discussed in this section because plaintiffs cannot establish that the violations were ongoing as of March 8, 2004, the date plaintiffs filed their complaint. Defendant further argues that because Teck has "installed new monitoring equipment, implemented new monitoring procedures, and installed additional backup monitoring systems," plaintiffs cannot establish that any of the monitoring and reporting violations at issue are likely to recur in the future.²⁷ Plaintiffs oppose defendant's motion on the grounds that the monitoring and reporting violations in this section are likely to recur in the future. Plaintiffs cross-move for summary judgment on the monitoring and reporting violations in Section II on the grounds that Teck admitted the past violations in its motion for summary judgment.

At issue is whether the alleged monitoring and reporting violations are wholly past or ongoing. The Clean Water Act "does not permit citizen suits for wholly past violations": rather, the statute 'confers jurisdiction over citizen suits when the citizen-plaintiffs make a good-faith allegation of continuous or intermittent violation.'²⁸ Citizen-plaintiffs are not required to "prove their allegations of ongoing noncompliance before jurisdiction attaches under § 505."²⁹

²⁷Motion at 18, doc. 44.

²⁸*Natural Resources Defense Council v. Southwest Marine, Inc.*, 236 F.3d 985, 998 (9th Cir. 2000) (quoting *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Foundation, Inc.*, 484 U.S. 49, 64 (1987)).

²⁹*Gwaltney*, 484 U.S. at 64.

To prevail at trial, a citizen-plaintiff must prove ongoing violations.³⁰ “[A] citizen plaintiff may prove ongoing violations ‘either (1) by proving violations that continue on or after the date the complaint is filed, or (2) by adducing evidence from which a reasonable trier of fact could find a continuing likelihood of a recurrence in intermittent or sporadic violations.’”³¹ The Ninth Circuit has “confirmed that ‘[i]ntermittent or sporadic violations do not cease to be ongoing until the date when there is no real likelihood of repetition.’”³² In determining whether violations are ongoing, the district court may consider “whether remedial actions were taken to cure violations, the *ex ante* probability that such remedial measures would be effective, and any other evidence presented during the proceedings that bears on *whether the risk of defendant’s continued violation had been completely eradicated* when citizen-plaintiffs filed suit.”³³

Plaintiffs’ third, sixth, ninth, and tenth claims each contain the allegations that the violations at issue are “ongoing to this day or are capable of repetition,” and that “without the imposition of appropriate civil penalties and the issuance of appropriate equitable relief,” Teck will continue to violate the permit conditions at issue. Based on the court’s review of the record, it appears that plaintiffs’ allegations of continuous or intermittent violations are based on a good-faith belief, formed after reasonable inquiry into the facts. Because plaintiffs have made the requisite good-faith allegations, plaintiffs have satisfied the threshold requirement for jurisdiction.³⁴

The court’s discussion next turns to whether the following monitoring and reporting violations are ongoing or reasonably likely to occur: failure to monitor flow and pH in May 2000 and June 3-9, 2001; failure to transmit TDS data from Station 10 in July

³⁰*Community Association for Restoration of the Environment v. Henry Bosma Dairy*, 305 F.3d 943, 953 (9th Cir. 2002).

³¹*Sierra Club v. Union Oil Co.*, 853 F.2d 667, 671 (9th Cir. 1988) (quoting *Chesapeake Bay Foundation, Inc. v. Gwaltney of Smithfield, Ltd.*, 844 F.2d 170, 171-72 (4th Cir. 1988)).

³²*Henry Bosma Dairy*, 305 F.3d at 953 (quoting *Chesapeake Bay Foundation*, 844 F.2d at 172).

³³*Union Oil*, 853 F.2d at 667 (quotation and citation omitted) (emphasis in original).

³⁴*Southwest Marine*, 236 F.3d at 998.

2000; failure to monitor TDS data on May 30, 2001; failure to monitor TDS for July 25-31, 2001; failure to report TDS data in May 2002; failure to sample for hardness in May 2002; failure to sample for fecal coliform on April 10, 2002; failure to conduct silver analysis in June 2000; failure to conduct metals analyses at Stations 10, 12, and 140 in June 2000; failure to perform TDS analyses at the mine site on July 10, 2000, and August 3, 2000; failure to conduct TSS analyses at the port site on July 7 and 26, 2000, and August 9, 2000; failure to perform ammonia analyses in June and July 2001; and, failure to conduct turbidity analyses in September 1999 and on June 10 and 13, 2000.

Plaintiffs suggest that because Teck has allegedly violated two other particular monitoring and reporting requirements after the March 2004 filing of this suit, “the Court is free to infer that all of the monitoring and reporting violations can be considered ongoing or capable of repetition.”³⁵ Plaintiffs do not cite, and the court is not aware of, any controlling authority which supports plaintiffs’ proposition. Moreover, the argument is illogical. The likelihood that conduct A will recur because conduct B has since occurred is, without more, not probative. Moreover, with respect to plaintiffs’ motion for summary judgment (but not Teck’s motion), it is enough to say that defendant has demonstrated that there are material questions of fact as to whether the two more recent monitoring and reporting violations alleged by plaintiffs actually were violations.

As discussed above, plaintiffs may establish ongoing violations either by proving violations that continue on or after the date the complaint is filed or by providing evidence “from which a reasonable trier of fact could find a continuing likelihood of a recurrence in intermittent or sporadic violations.”³⁶ In determining whether the alleged violations in this section are ongoing or reasonably likely to recur, the court follows the approach adopted by the Ninth Circuit in *Union Oil* and considers whether remedial actions have been taken to cure the alleged violations, the probability that such remedial measures will be effective, and any evidence bearing on whether the risk of

³⁵Plaintiffs’ Reply at 15, doc. 70.

³⁶*Union Oil*, 853 F.2d at 671 (quoting *Chesapeake Bay*, 844 F.2d at 171-72).

defendant's continued violation was completely eradicated when plaintiffs filed their complaint.³⁷ The court considers each of the alleged violations below.

A. Monitoring Flow and PH at Port Site in May 2000 and June 3-9, 2001

Paragraph 151 of plaintiffs' ninth claim alleges that Teck violated condition I(B)(5) of its port NPDES permit by failing to properly monitor discharge from Outfall 005. Plaintiffs specifically allege that Teck violated condition I(B)(5) by failing to continuously monitor flow and pH in May 2000 and by failing to monitor pH on June 3-9, 2001. Defendant argues that the installation of a programmable logic controller, as well as several flow meters and a pH probe, at the new IX plant at the port site eliminated the data transfer problems that led to the above violations. Defendant offers the testimony of Mark Thompson, Senior Environmental Coordinator at the Red Dog Mine/Port operation, that the same system has been "used at the mine to automatically record flow and pH readings during the whole effective life of the 1998 Mine NPDES permit without any data loss or similar problems."³⁸ Consequently, Thompson avers that there is "no reason to believe that the problems that occurred in May 2000 and June 2001 have any reasonable probability of reoccurrence in the future."³⁹

In support of their allegations that the monitoring violations at issue are likely to recur, plaintiffs offer the expert testimony of Dr. Robert Moran, who has "more than thirty-two years of domestic and international experience in conducting and managing water quality, geochemical and hydrogeologic work."⁴⁰ Dr. Moran testifies that "[m]onitoring equipment and computer hardware are always susceptible to malfunctioning and software packages are almost always subject to some degree of error."⁴¹ Dr. Moran also states that Teck's assumption that new "computer hardware

³⁷*id.* at 671.

³⁸Declaration of Mark Thompson at 13, doc. 44.

³⁹Declaration of Mark Thompson at 13, doc. 44.

⁴⁰Declaration of Dr. Robert Moran at 1, doc. 54.

⁴¹*id.* at 5.

and software, such as the IX plant's programmable logic controller" will prevent all future violations is naive as Teck "has admitted that similar technology has failed in the past."⁴² Plaintiffs' contention is, in effect, that defendant must offer evidence that it has absolutely prevented all future violations, even if they might result from a failure of a new technology which has not failed. That is not the applicable standard.⁴³ Moreover, neither Teck nor anybody else could ever meet such a standard, because it may ever be said, as Dr. Moran has said, that monitoring and computer equipment are "always susceptible to malfunctioning." Were the courts to adopt the standard embedded in Dr. Moran's testimony, all violations of any permit limit would always be on-going, no matter what changes or corrections had been made, and no matter how long the changed system had functioned without a violation.

The Ninth Circuit has concluded that intermittent or sporadic violations cease to be ongoing on the date when there is no real likelihood of repetition. Here, defendant has demonstrated that the failure to monitor for flow and pH has no real likelihood of repetition in light of the installation of the PLC system at the IX plant, and the evidence that the same system has been employed at the mine site during the effective life of the 1998 Mine NPDES permit without any data loss or transfer problems.

Defendant has demonstrated that there is no genuine issue of material fact regarding whether these violations are likely to recur. Teck's motion for summary judgment is granted as to the violations for failing to monitor flow and pH in May 2000 and failing to monitor pH on June 3-9, 2001.

B. Transmitting TDS Data from Station 10 in July 2000

Paragraph 162 of plaintiffs' tenth claim alleges that Teck violation the requirements of the Mine Consent Order by not transmitting TDS data on July 14, 2000. Defendant alleges that it monitored discharge for TDS, but was unable to transmit the TDS data from Station 10 on July 14, 2000, because of solar flares which disrupted Teck's data transmission system. Defendant argues that plaintiffs cannot establish that

⁴²Declaration of Dr. Robert Moran at 5, doc. 54.

⁴³See, *Union Oil*, 853 F.2d at 671.

this violation has any reasonable probability of reoccurring because Teck installed a second data transmission system in 2001 that is unaffected by solar flares. Defendant also offers Mark Thompson's testimony that there have been no transmission or data problems since the installation of the new system, and that "there is no reasonable probability of a reoccurrence of the problem experienced in July 2000."⁴⁴

In support of their argument that defendant has not eradicated the risk of similar malfunctions occurring, plaintiffs cite Dr. Moran's testimony that "[s]olar flames...will happen in the future and can reasonably be expected to cause similar violations."⁴⁵ Moran's testimony does not rebut defendant's evidence that it installed a second data transmission system that is unaffected by solar flares. Plaintiffs also cite the August 2004 mine DMR as evidence that data transmission violations continue to occur. The August 2004 DMR states in pertinent part:

On August 25, telemetry feed providing real time monitoring of Station 160 failed. Discharge was stopped until the telemetry feed was reestablished. During this time all required monitoring data was collected and was within permitted levels.⁴⁶

Contrary to plaintiffs' assertion, the August 2004 DMR does not provide evidence that a data transmission violation due to solar flares occurred after plaintiffs filed their complaint.

Plaintiffs raise no genuine issue of material fact whose resolution is required respecting whether the reporting violation which occurred on July 14, 2000, is continuing or reasonably likely to occur in the future. Defendant's evidence is convincing. Defendant's motion for summary judgment is granted as to the July 14, 2000, reporting violation.

C. TDS Data Monitoring on May 30, 2001

Paragraph 162 of plaintiffs' tenth claim alleges that defendant violated the Mine Consent Order by failing to conduct TDS monitoring operations at Station 10 on May 30,

⁴⁴Declaration of Mark Thompson at 10, doc. 44.

⁴⁵Declaration of Dr. Robert Moran at 4, doc. 54.

⁴⁶August 2004 DMR at 3, exh. 20, Moran Dec, doc. 54.

2001. Defendant alleges that the violation occurred due to a problem with a conductivity probe at Station 10. Defendant offers evidence that it corrected the problem by replacing the probe and altering the manner in which the probe's wires are anchored. Defendant does not provide any evidence regarding the probability that its remedial measures will be effective. Plaintiffs argue that similar violations related to probe malfunctions are likely to recur. In support, plaintiffs cite the August 2004 DMR, which indicates that a temperature probe malfunctioned on August 6, 2004. Defendant responds that a temperature probe and a conductivity probe perform two different functions, and that no violation occurred as a result of the temperature probe malfunction because the consent order does not require Teck to monitor or report temperature.

Because material questions of fact exist as to whether monitoring violations related to probe malfunctions are likely to recur, the court denies the parties' cross-motions for summary judgment as to the monitoring violation on May 30, 2001.

D. TDS Reporting at Station 7 on July 25-31, 2001

Paragraph 163 of plaintiffs' tenth claim alleges that Teck violated the Mine Consent Order by failing to timely report required data for Station 7 on July 25-31, 2001. Defendant alleges that the violations on July 25-31, 2001, were caused when a conductivity probe was replaced but not recalibrated to work with the transmitter at Station 7. Defendant provides evidence that Teck "upgraded to digital transmitters" in 2003, after which "possible recalibration problems have been avoided and there is no reasonable probability of reoccurrence of this problem."⁴⁷ Plaintiffs cite Dr. Moran's testimony that the installation of new technology, such as digital transmitters, will not prevent all future violations. As previously discussed, Dr. Moran's banal assertions that technology is never fool-proof do not really address the evidence presented as to the installation of new technology replacing that which failed and the track record of that new technology.

⁴⁷Declaration of Mark Thompson at 11, doc. 44.

In light of defendant's showing that it has taken remedial measures to address the problems which led to the monitoring violations on July 25-31, 2001, and the showing that the remedial measures have been effective, plaintiffs' objections are insufficient to withstand summary judgment. Teck's motion for summary judgment is granted as to the alleged TDS reporting violations on July 25-31, 2001.

E. Reporting TDS Data in May 2002

Paragraph 163 of plaintiffs' tenth claim alleges that defendant violated the requirements of the Mine Consent Order by failing to timely report data required at Station 10 for May 27-31, 2002. Defendant alleges that the TDS data was not timely reported because Mark Thompson was not at the mine when the May 2002 DMR was prepared and other personnel at the mine were not experienced with how to process the TDS data.⁴⁸ Mr. Thompson testifies that he processed the TDS data upon his return and included it in the June 2002 DMR, and that the environmental staff at the mine has now been trained on how to process the TDS data. Thompson further testifies that "the problems that led to the delay in the reporting of the TDS monitoring information in May 2002 have not reoccurred and there is no reasonable probability of their reoccurrence."⁴⁹

The only evidence plaintiffs offer in support of their allegation that the reporting violations are ongoing is Dr. Moran's testimony that even with increased staff training, "comparable human errors are likely in the future, leading to similar violations" because it is not possible to eliminate all human error.⁵⁰ Dr. Moran's assertion that humans are always susceptible to error misses the point in the same way that his opinions about the inevitability that software, computers, and other technology is not always error free. One need only cite Pope for the proposition that "to err is human." However, that truism is does not establish the standard which applies here. Plaintiffs have offered nothing to counter Teck's evidence of specific remedial measures which have to date eliminated

⁴⁸Declaration of Mark Thompson at 11, doc. 44.

⁴⁹*Id.* at 12.

⁵⁰Declaration of Dr. Robert Moran at 6, doc. 54.

the violations. Defendant is entitled to summary judgment as to the reporting violations which occurred on May 27-31, 2002, because they are not continuous or reasonably likely to recur.

F. Reporting Silver Analyses for Outfall 001 in June 2000; Reporting Metals Analyses for Stations 10, 12, and 140 in June 2000; Reporting TSS Analyses at the Mine on July 10, 2000 and August 3, 2000; Reporting TSS Analyses at the Port on July 7 and 26, 2000, and August 9, 2000

Paragraph 118 of plaintiffs' sixth claim alleges that Teck violated condition I(A)(1) of its mine site permit by failing to report results for silver analysis in June 2000, by failing to report results for totally suspended solids ("TSS") on July 10, 2000, and by failing to report results for TSS on August 3, 2000. Paragraph 151 of plaintiffs' ninth claim alleges that Teck violated port site permit condition I(B)(5) by failing to monitor for TSS on July 7 and 26, 2000, and on August 9, 2000. Paragraph 121 of plaintiffs' sixth claim alleges that Teck violated port site permit condition I(D)(1) by failing to analyze samples for metals at Stations 10, 12, and 140 in June 2000.

Defendant alleges that in all of the above instances, the samples were collected and sent to an outside lab for analysis. In 2000, Teck implemented a new software program called "Envista" at the Red Dog Mine and port site. Defendant offers evidence that the above violations occurred because the "Envista system had not initially been programmed to include a request for the silver, metals and TSS analyses on the chain of custody (COC) form."⁵¹ Defendant offers further testimony that the "programming errors that led to the missed analyses for silver, metals and TSS were discovered and corrected in 2000 through reprogramming of the Envista," that all staff using the Envista system received additional training in 2000 and 2001 "to inform them of this potential problem," and that since July 2001 no "analytical instructions conveyed to the outside labs in the COC have been inadvertently omitted."⁵²

⁵¹Declaration of Mark Thompson at 13, doc. 44.

⁵²*Id.* at 13 -14.

Plaintiffs proffer Dr. Moran's expert testimony that "software packages are almost always subject to some degree of error" and that, based on his experience in the mining industry, he "would reasonably expect some form of computer or software error to occur at the mine in the future."⁵³ As previously noted, Dr. Moran's testimony misses the point and is far too generalized to be relevant. He points to nothing specific in the new technology and to nothing specific in the actual experience with the new technology which supports the proposition that the violations are continuing or will recur. To say that all software is almost always subject to error may be literally accurate, but is legally insufficient to raise a genuine issue of material fact.

Teck has presented evidence that remedial actions were taken to cure the violations and that the remedial measures have been effective. Plaintiff points to nothing in the nature of the measures taken or the effect those measures have actually had which shows the particular violations have any likelihood of recurrence. Defendant's motion for summary judgment is granted as to the violations for failing to report results for silver analysis for June 2000, failing to report TSS results for July 10, 2000, and August 3, 2000, failing to monitor for TSS on July 7 and 26, 2000, failing to monitor for TSS on August 9, 2000, and failing to analyze samples for metals at Stations 10, 12, and 140 in June 2000. The alleged violations are dismissed.

G. Monitoring Ammonia in June and July 2001

Paragraph 121 of plaintiffs' sixth claim alleges that Teck violated mine site permit condition I(D)(1) by failing to analyze ammonia at Station 10 and at Station 73 in June 2001, and by failing to take a second ammonia sample at Station 73 in July 2001. Defendant alleges that the missed ammonia analyses were again caused by a programming error in Envista, namely that the COC did not include a specific instruction to the outside lab to conduct an analysis for ammonia. Defendant also offers Mark Thompson's testimony that "reprogramming solved the problem and since July 2001 no

⁵³Declaration of Dr. Robert Moran at 5-6, doc. 54.

ammonia or other sample analytical instructions conveyed to the outside labs in the COC have been inadvertently omitted.”⁵⁴

Once again, Teck has presented evidence that remedial actions were taken to cure the violations and that the remedial measures have been effective. Once again, plaintiff has failed to demonstrate that a genuine issue of fact exists by presenting evidence that the violations are likely to recur. Defendant’s motion for summary judgment is granted as to the June 2001 and July 2001 violations for failure to monitor for ammonia.

H. Monitoring Turbidity in September 1999 and June 10 and 13, 2000

Paragraph 118 of plaintiffs’ sixth claim alleges that defendant violated condition I(A)(1) of its mine site NPDES permit by failing to monitor discharge at Outfall 001 at the frequencies required by the permit, including failing to take weekly samples for turbidity in September 1999, and by failing to take grab samples for turbidity on June 10 and 13, 2000. Defendant alleges that the above violations occurred because technicians forgot to take turbidity measurements. Mark Thompson testifies that Teck has taken three specific measures to remedy the above problem: 1) installation of the Envista program which reminds technicians to take turbidity measurements and input the data into the database, 2) the requirement that a supervisor review the Envista schedule on a weekly basis for completion of turbidity measurements, and 3) the implementation of disciplinary policies for failure to monitor for turbidity.⁵⁵ Thompson further testifies that “[t]here have not been any missed turbidity samples since June 13, 2000.”⁵⁶

In support of their argument that future violations are likely to occur, plaintiffs offer Dr. Moran’s testimony that software and human error are likely to occur in the future, and that Teck’s “increased disciplinary measures seems to indicate that [Teck’s] management has an expectation of future human error and a plan to address the

⁵⁴Declaration of Mark Thompson at 14, doc. 44.

⁵⁵Declaration of Mark Thompson at 15, doc. 44.

⁵⁶*Id.*

problem when error occurs.”⁵⁷ As previously discussed, Dr. Moran’s banal opinions are simply insufficient to raise a genuine issue of material fact.

Defendant demonstrated that it took remedial actions to cure the violations and the remedial measures have been effective. Plaintiffs have failed to raise material questions of fact respecting whether the violations are likely to recur. Teck’s motion for summary judgment is granted as to the violations for failure to monitor turbidity in September 1999 and on June 10 and 13, 2000.

Section Three

Plaintiffs move for summary judgment dismissing on ten monitoring and reporting violations that Teck admitted in its answer in the KRPC litigation, but denies in the current litigation. Plaintiffs allege that in the KRPC litigation, Teck admitted that it violated the port site permit on the following dates:

1. April 1999: weekly analysis for BOD was not conducted for two weeks (two violations)
2. April 1999: only two samples analyzed for fecal coliform (two violations)
3. August 1999: sample not analyzed for salinity (one violation)
4. May 8, 2000: weekly coliform samples not analyzed (one violation)
5. May 8, 2000: weekly BOD samples not analyzed (one violation)
6. May 29, 2000: weekly coliform samples not analyzed (one violation)
7. May 29, 2000: weekly BOD samples not analyzed (one violation)
8. February 4, 2001: weekly BOD samples not analyzed (one violation)⁵⁸

Plaintiffs argue that because defendants admitted the above violations in the KRPC litigation, defendants are precluded from denying identical violations in the current suit. Plaintiffs urge that Teck’s admissions in the prior suit constitute admissions by a party opponent under Federal Rule of Evidence 801(d)(2). A statement in an answer is a judicial admission, “as is a failure in an answer to deny an allegation.”⁵⁹

⁵⁷Declaration of Dr. Robert Moran at 6, doc. 54.

⁵⁸Opposition and Cross-Motion at 21, doc. 54.

⁵⁹*American Title Insurance Co. v. Lacelaw Corp.*, 861 F.2d 224, 226 (9th Cir. 1988).

When an answer in an action is sworn to by the party, “it is competent evidence against him in another suit as a solemn admission by him of the truth of the facts stated.”⁶⁰

Defendant does not dispute that it admitted the ten violations at issue in the KRPC litigation. Accordingly, the court accepts as true plaintiffs’ allegation that Teck admitted the above violations in the KRPC litigation. However, defendant argues that plaintiffs are not entitled to summary judgment on the violations because plaintiffs have not demonstrated that the violations are ongoing. In support, defendant cites Mark Thompson’s testimony that the ten violations at issue were not ongoing when plaintiffs filed their complaint, and that it is unlikely that the alleged violations will recur in the future. Defendant has established the existence of a genuine issue of material fact concerning whether the ten violations alleged above are ongoing. It follows that plaintiffs’ motion for summary judgment as to these ten violations must be denied.

Plaintiffs also move for summary judgment on three monitoring and reporting violations Teck admitted in its answer in the case at bar. Plaintiffs allege that defendant admitted two separate violations in September 2001 “when samples for BOD and organic priority pollutants were taken from water that was not discharged through Outfall 001 in violations of mine permit condition I(A)(1)” and one violation on June 22, 2000, when defendant “failed to monitor total suspended solids, a violation of port permit condition I(B)(5).”⁶¹

In its answer, defendant “admits the BOD and OPPS samples for September 2001 were taken from treated water that was not discharged from Outfall 001 but denies this constituted a violation of permit requirements” because at the time, treated water was being diverted to the tailings impoundment, rather than being discharged.⁶² Because the above language does not constitute an admission of the two violations, plaintiffs’ motion for summary judgment is denied as to the alleged violations in September 2001 regarding samples for BOD and organic priority pollutants.

⁶⁰*Pope v. Allis*, 115 U.S. 363, 370 (1885).

⁶¹Opposition and Cross-Motion at 20, doc. 54.

⁶²Teck’s Answer at 26, ¶18, doc. 6.

In paragraph 151 of defendant's answer, defendant "admits that the TSS sample shipped for analysis on June 22, 2000 was not properly preserved, and as a result the analysis could not be conducted."⁶³ However, in its opposition to plaintiffs' motion for summary judgment, defendant argues that the violation is not ongoing. In support, defendant cites Mark Thompson's testimony that he is aware of only two times when samples were improperly preserved and, thus, were unable to be properly analyzed during his employment at the Red Dog mine from 1999 to the present. Teck has raised material questions of fact as to whether the alleged violation is wholly past, so plaintiffs' motion for summary judgment is denied as to the violation for failing to monitor TSS on June 22, 2000.

V. CONCLUSION

For the reasons set out above, plaintiffs' cross-motion for summary judgment at docket 54 is **DENIED**, and defendant's motion for partial summary judgment at docket 44 is **GRANTED IN PART** and **DENIED IN PART** as follows:

Defendant's motion for partial summary judgment at docket 44 is **GRANTED** as to the following violations and the claims based thereon are **DISMISSED**:

- June 2000 violation concerning OPPS (§118 of complaint)
- November 2002 violations for failing to report aluminum, cadmium, chromium, copper, iron, lead, manganese, nickel, and zinc monitoring results for the Sulfur Creek ambient monitoring station (§124 of complaint)
- May 2002 violations for failing to monitor total hardness and copper at Outfall 001 (§148 of complaint)
- July 2002, August 2002, and September 2002 violations for failing to conduct WET tests on *Mysidopsis bahia* and *Holmesmysis costata* (§148 of complaint)
- May 2000 violation for failing to monitor discharge from Outfall 005 for hardness (§ 151 of complaint)
- July 14, 2000, violations of the Mine Consent Order for failing to monitor and report for TDS (§162 of complaint)

⁶³Teck's Answer at 31, doc. 6.

- May 2000 violation for failure to monitor flow and pH (¶151 of complaint)
- June 3-9, 2001, violations for failure to monitor pH (¶151 of complaint)
- May 30, 2001, violation of the Mine Consent Order for failing to monitor TDS at Station 10 (¶162 of complaint)
- July 25-31, 2001, violations of the Mine Consent Order for failing to timely report TDS data for Station 7 (¶163 of complaint)
- May 27-31, 2002, violations of the Mine Consent Order for failing to timely report TDS data at Station 10 (¶163 of complaint)
- June 2000 violation for failing to report silver analysis (¶118 of complaint)
- July 10, 2000, and August 3, 2000, violations for failing to report TSS analyses (¶118 of complaint)
- July 7 and 26, 2000, and August 9, 2000, violations for failing to monitor TSS (¶151 of complaint)
- June 2000 violations for failing to report metals analyses (¶121 of complaint)
- June and July 2001 violations for failing to monitor ammonia (¶121 of complaint)
- September 1999 and June 10 and 13, 2000, violations for failing to monitor turbidity (¶118 of complaint)

Defendant's motion for partial summary judgment is **DENIED** as to the remaining monitoring and reporting claims.

DATED at Anchorage, Alaska, this 3rd day of February 2006.

/s/
JOHN W. SEDWICK
UNITED STATES DISTRICT JUDGE