Attachment 22 to

GNRO-2012/00039

ER Reference - Entergy 2010e (NPDES CRs)

CR-GGN-2006-02714

Significance: D
Operability: NOT REQUIRED
Classification: ACTIONS TAKEN
Date Discovered: 07/10/2006

Reportability: NOT REPORTABLE
CR Status: Closed on July 11, 2006

Condition Summary:

On July 6, 2006 at 09:00 pH for Outfall 016 measured 9.23. This exceeded the NPDES permit limitation of 9.00. This reading was taken by the GGNS contract laboratory [Argus Analytical] field technician and the number was reported to the permittee on July 10, 2006. A subsequent pH measurement taken July 10, 2006 at 09:49 revealed a pH of 8.89. An investigation of the cause of this event was performed on July 10, 2006. No change to processes or programs that influence this outfall were identified. The contract manager was contacted regarding management of the HVAC unit that discharges to this outfall. No changes to the HVAC chemical treatment or chemical usage was identified. Based upon this investigation and subsequent pH measurement, no apparent cause was identified for this pH exceedance. A courtesy notification was made to the Mississippi Department of Environmental Quality [MDEQ] on July 10, 2006. A non-compliance report will be included with the Discharge Monitoring Reports [DMRs] submitted to MDEQ July 28, 2006. GGNS licensing department was notified of this event and determined no NRC reportability is required.

Responsible Dept: Tech Chemistry Mgmt
Originated: 07/10/2006 by Shaw,Rusty, Tech Chemistry Support Staff

Affected Systems:
Affected Equipment:

Remarks:

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 07/11/2006 by Swords,Gary D
Significance Code: D
Description: Assigned To: Tech Chemistry Mgmt
Classification Code: ACTIONS TAKEN

Reportability Version: 1 Report Number:
Reportability Code: NOT REPORTABLE
Reportability Description:
Performed: 07/10/2006 by Abraham,William B

Not reportable - This event does not meet the screening criteria of PAP 01-S-06-5, Att III.
Discussed this issue with the originator of CR. He advised GGNS licensing department was notified of this event and determined no NRC reportability is required. Reviewed Operability Statement.

Operability Version: 1 Operability Code: NOT REQUIRED
Immediate Reportability Code: NOT REPORTABLE
Operability Description:
Performed: 07/10/2006 by Liddell,Ricky M

This CR documents an NPDES issue. A courtesy notification was made to the Mississippi Department of Environmental Quality [MDEQ] on July 10, 2006. A non-compliance report wil be included with the Discharge Monitoring Reports [DMRs] submitted to MDEQ July 28, 2006. This condition does not impact any TS/TRM or safety related equipment or requirements and is not immediately reportable per 01-S-06-5.
Operability Approved: 07/10/2006 by Mathes,Ernest W

Approval Descriptior

CR-GGN-2006-03875

Significance: D
Operability: NOT REQUIRED
Classification: ACTIONS TAKEN
Date Discovered: 10/05/2006

Reportability: NOT REPORTABLE
CR Status: Closed on October 09, 2006

Condition Summary:

At 09:00 the pH measured at outfall 014 [outlet of sedimentation basin B / south basin] was 9.17. This exceeds the NPDES Permit MS 0029521 page 17 of 33 limitation of 6.5 - 9.0. Caus is believed due to heavy algae growth [CO2 removal], natural process. See attachment for more information.

Responsible Dept: Tech Chemistry Mgmt
Originated: 10/05/2006 by Lassetter Jr,John M, Tech Chemistry Mgmt

Affected Systems:
Affected Equipment:

Remarks:

Reference Type | Description	Reference Type | Description	Reference Type | Description
SCREEN NOT SAFETY EQ : closed		

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 10/09/2006 by Swords,Gary D
Description: Assigned To: Tech Chemistry Mgmt
Significance Code: D
Classification Code: ACTIONS TAKEN

Reportability Version: 1 Report Number:
Reportability Code: NOT REPORTABLE
Reportability Description:
Performed: 10/05/2006 by Jackson,Rita R

Not reportable - This event does not meet the screening criteria of PAP 01-S-06-5, Att III.

Per NUREG 1022, Licensees generally do not have to report media and government interactions unless they are related to the radiological health and safety of the public or onsite personnel, or protection of the environment. For example, the NRC does not generally need to be informed under this criterion of:
? minor deviations from sewage or chlorine effluent limits
? minor non-radioactive, onsite chemical spills
? minor oil spills
? problems with plant stack or water tower aviation lighting
? peaceful demonstrations
? routine reports of effluent releases to other agencies
? releases of water from dams associated with the plant

This was a minor deviation from effluent and does not appear to meet reporting criteria
See section 3.2.12 News Release or Notification of Other Government Agency for details.

Operability Version: 1 Operability Code: NOT REQUIRED
Immediate Reportability Code: NOT REPORTABLE

CR-GGN-2006-03931

Significance: C
Operability: NOT REQUIRED
Classification: NON-SIGNIFICANT
Date Discovered: 10/10/2006

Reportability: NOT REPORTABLE
CR Status: Closed on March 23, 2007

Condition Summary:

14:00 Oct. 10, 2006: During routine data review, determined that on Oct. 6, 2006 at 13:44, during the PSW sodium hypochlorite injection, an NPDES permit requirement to sample Outfa 001 [Discharge to River] at an interval not to exceed 30 minutes was not met. The sample was collected at a 45 minute interval. No detectable chlorine concentrations were measured at Outfall 001during the injection.

This requirement is implemented in procedure 08-S-04-499 Step 6.2.28 a.

Initial investigation:

During task performance, the plant computer [PDS] is used to monitor 1P44N035, PSW Chlorine Monitor for residual chlorine concentration in plant piping to verify that target chlorine concentration is met.

The computer point stopped updating during the injection and the analyst went into the power block to collect and analyze a grab sample to determine residual concentrations. When analyst returned to the Outfall 001 sample point, the 30 minute sample interval had been exceeded.

Reportability:

Per NPDES permit Part II A. 3 a. this noncompliance should be reported verbally to the Ms Dept. of Env. Quality within 24 hours of the time the permittee becomes aware of the circumstances [due < 1400 10/11/06]. A follow-up written report is required within 5 days [due 14:00 10/15/2006].

Based on review of NUREG 1022 Section 3.2.12 and discussion with plant staff licensing, this non-compliance does not require additional notifications.

Responsible Dept: Tech Chemistry Mgmt
Originated: 10/10/2006 by Lassetter Jr,John M, Tech Chemistry Mgmt
Affected Systems:
Affected Equipment:
Remarks:

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 10/11/2006 by Hickman,James E
Significance Code: C
Description: Assigned To: Tech Chemistry Mgmt
Classification Code: NON-SIGNIFICANT
H lvl 2

Reportability Version: 1 Report Number:
Reportability Code: NOT REPORTABLE
Reportability Description:
Performed: 10/11/2006 by Larson,Michael J

CR-GGN-2007-00851

Significance: C
Operability: NOT REQUIRED
Classification: NON-SIGNIFICANT
Date Discovered: 03/01/2007

Reportability: NOT REPORTABLE
CR Status: Closed on March 26, 2007

Condition Summary:

Reference CR GGN 2007-0835. On 2/28/2007 approx. 2500 gallons of a water/oil/ AFFF mixture was recovered from oil water separator / piping in from of the Vehicle Maintenance shop Heavy rains on the morning of 3/1/07 flushed residual AFFF [Cat ID 81064024, 81064023] from the oil water separator and piping into the site storm drain system and into a creek on the North side of the plant property. This creek drains under the north access road into the North sedimentation basin to NPDES Outfall 013 and eventually to Gin Lake. The turbulence in the storm drain system resulted in persistent foaming in greater that trace amounts. This constitutes a NPDES permit exceedance. At 12:07 3/1/2007 Ms Dept of Env Quality Personnel were notified via a voice mail. The voice mail fulfills the 24 hour NPDES requirements NPDES Permit Part II A.3.a). The material is 100% water soluble so mitigation options are limited. The primary concern for the material is the potential to deplete oxygen in the receiving waters which could impact aquatic life in a negative fashion.

Responsible Dept: Tech Chemistry Mgmt
Originated:

Affected Systems:
Affected Equipment:

Remarks:

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 03/05/2007 by Courtney,Richard A
Description: Assigned To: Tech Chemistry Mgmt
Significance Code: C
Classification Code: NON-SIGNIFICANT

Reportability Version: 1 Report Number:
Reportability Description:
Reportability Code: NOT REPORTABLE
Performed: 03/01/2007 by Larson,Michael J

CR-GGN-2008-00233

Significance: C
Operability:
Classification: CORRECT/ADDRESS
Date Discovered: 01/15/2008

Reportability: NOT REPORTABLE
CR Status: Closed on February 05, 2008

Condition Summary:

NPDES permit exceedance: Outfall 010 [sewage plant effluent] pH measured at 6.34 at 08:35 on 1/15/2008 by Contract personnel. NPDES permit limitation is 6.5 - 9.0.

09:00 - 09:30 Plant staff Chemistry performed additional measurements at various locations in the sewage plant effluent mixing trough and determined that the suppressed pH resulted from a bi-product associated with addition of the dechlorination chemical [sodium bisulfite]. Depending on the time and location of the Outfall 010 sample relative to the sodium bisulfite addition point, the pH may be suppressed.

Responsible Dept: Tech Chemistry Mgmt
Originated: 01/15/2008 by Lassetter Jr,John M, Tech Chemistry Mgmt

Affected Systems:
Affected Equipment:

Remarks:

Reference Type | Description	Reference Type | Description	Reference Type | Description
OPS BYPASS OVERSIGHT :		

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 01/17/2008 by Swords,Gary D
Significance Code: C
Description: Assigned To: Tech Chemistry Mgmt
Classification Code: CORRECT/ADDRESS
operability discussed with OPS

Reportability Version: 1 Report Number:
Reportability Code: NOT REPORTABLE
Reportability Description:
Performed: 01/16/2008 by Owens Jr,James E
Not reportable - This event does not meet the screening criteria of PAP 01-S-06-5, Att III. Refer to the immediate actions.

Trend Code | Trend Code Type		Trend Code | Trend Code Type	
CYMG :	AD	P :	HEP FACTOR
1 :	REPORT WEIGHT	KW-EFFLUENT :	KEYWORDS
NOT APPLICABLE :	INPO BINNING		

Corrective Actions

CR-GGN-2008-02187

Significance: C
Operability:
Classification: CORRECT/ADDRESS
Date Discovered: 05/05/2008

Reportability: NOT REPORTABLE
CR Status: Closed on May 14, 2008

Condition Summary:

March 2008 Discharge Monitoring Reports [DMRs] were not postmarked by Apr 28 as required by NPDES permit page 21 of 33, Part I.D.2.a. The reports were routed for signature on April 19 but individual did not follow through to ensure package was signed / mailed.

Responsible Dept: Tech Chemistry Mgmt
Originated: 05/05/2008 by Lassetter Jr,John M, Tech Chemistry Mgmt

Affected Systems:
Affected Equipment:

Remarks:

Reference Type | Description	Reference Type | Description	Reference Type | Description
MISC : ADMIN issue - no MI		

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 05/08/2008 by Jones,Milton L
Description: Assigned To: Tech Chemistry Mgmt
Significance Code: C
Classification Code: CORRECT/ADDRESS

Reportability Version: 1 Report Number:
Reportability Code: NOT REPORTABLE
Performed: 05/05/2008 by Larson,Michael J
Reportability Description:
Not reportable - This event does not meet the screening criteria of PAP 01-S-06-5, Att III.

Trend Code | Trend Code Type	Trend Code | Trend Code Type
CYMG : WW	H : HEP FACTOR
CYMG : HU U-LAPSE	1 : REPORT WEIGHT
KW-ENVIRONMENTAL MONITORING : KEYWORDS	CY1 : INPO BINNING

Corrective Actions

Corrective Action # 1 **Type:** DISP - CA

The CRG has classified this CR Category C (Corrective Action) and assigned to the responsible department to correct the identified condition per EN LI-102 Category C - Corrective Action. Perform disposition review and ensure actions are assigned as applicable to correct the problem. If disposition review determines the problem is broader or more severe than initially assigned, present the information to the CRG for review and potential re-categorization. A Root Cause, Apparent Cause Evaluation / Equipment Failure Evaluation is not

CR-GGN-2008-03929

Significance: C
Operability:
Classification: CORRECT/ADDRESS
Date Discovered: 08/07/2008

Reportability: NOT REPORTABLE
CR Status: Closed on September 30, 2008

Condition Summary:

A sample analysis for July 24, 2008 has been received from Argus Laboratory indicating a 1.39 mg/l Zinc concentration in Outfall 002; at this point it is considered a potential exceedence of the daily maximum requirement of 1.0 mg/l. There are two sample requirements per month for this parameter at Outfall 002. The first sample for July 10, 2008 was analyzed and came back 0.539 mg/l and below the permit requirement. If the July 24th sample is confirmed as indicated the monthly average for this parameter will still be within compliance with the NPDES permit requirements. The possible reason for this is the flush of the natural draft cooling tower on July 22, 2008; resulting in additional zinc in the effluent.

Responsible Dept: Chemistry Mgmt GGN
Originated: 08/07/2008 by Shepphard,Charles, Chemistry Staff GGN

Affected Systems:
Affected Equipment:

Remarks:

Reference Type | Description	Reference Type | Description	Reference Type | Description
MISC : Chemistry issue - mc		

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 08/11/2008 by Lee,George H
Description: Assigned To: Chemistry Mgmt GGN
Significance Code: C
Classification Code: CORRECT/ADDRESS

Reportability Version: 1 Report Number:
Reportability Code: NOT REPORTABLE
Reportability Description:
Performed: 08/11/2008 by Larson,Michael J

NOT REPORTABLE - This event does not meet the screening criteria of PAP 01-S-06-5, Att III.

Based on discussions with Chemistry personnel, the condition noted is a MINOR deviation similar to the example given such as exceeding sewage or chlorine effluent limits.

As stated in NUREG 1022, Licensees generally do not have to report media and government interactions unless they are related to the radiological health and safety of the public or onsite personnel, or protection of the environment. The purpose of this criterion is to ensure the NRC is made aware of issues that will cause heightened public or government concern related to the radiological health and safety of the public or on-site personnel or protection of the environment. The NUREG further states: clarifications are intended to set a reporting threshold that ensures necessary reporting, while minimizing unnecessary reporting.

Zinc levels are such that impact on the Environment is minimal and of a minor nature - no press releases are planned or anticipated for this release - therefore not reportable.

REFERENCES: NUREG 1022 - PAGE 72, 01-S-06-5, REAP.

Trend Code | Trend Code Type	Trend Code | Trend Code Type

CR-GGN-2008-04197

Significance: C
Operability: NOT REQUIRED
Classification: CORRECT/ADDRESS
Date Discovered: 08/21/2008

Reportability: NOT REPORTABLE
CR Status: Closed on August 28, 2008

Condition Summary:

At 0910 8/21/08, Contract lab personnel notified GG plant staff that free residual chlorine [FRC] measured at NPDES Outfall 010 [Sewage Plant Effluent] was 1.18 mg/L. This exceeds th daily maximum limitation of 0.5 mg/L listed in the NPDES permit page 13.

NOTE: Chlorine is added to the sewage plant effluent to control bacteria. A de-chlorinating chemical [sodium bisulfite] is added to neutralize any residual chlorine prior to the sewage plant effluent discharge to sedimentation basin A [north basin].

GG Plant staff immediately requested lab personnel to resample and dispatched the sewage plant operator to verify sodium bisulfite [de-chlorination chemical] feed. Sewage plant operator found a fouled sensor which affected [reduced] the rate of de-chlorination chemical addition.

Sewage plant operator cleaned the probe. This action immediately increased the de-chlorination chemical addition rate.

Resample of Outfall 010, at 0950 8/21/08, indicated FRC was non-detectable, within specification at < 0.1 mg/L.

No negative effects on biota in Basin A were noted.

Cause of the upset:

Sewage Plant operations on 8/20/08 included cleaning the clarifier portion of the plant. This activity is associated with an infrequent maintenance activity on a sludge return line. Clarifie cleaning increases the amount of solids present in the contact chamber. Increased solids can gradually create a film on the de-chlorination sensor. The film can reduce probe sensitivity and reduce the de-chlorination chemical addition rate.

Based on the magnitude and duration of the non-compliance this is considered a minor deviation in chlorine concentration that does not represent a threat to public health or the environment. It does represent a non-compliance with the NPDES permit and has been reported to the Ms Dept of Env Quality in accordance with permit conditions. No additional reportability is required. EN-OM-128 Att.. 9.1 requires Duty Manger notification for not

Responsible Dept: Chemistry Mgmt GGN
Originated: 08/21/2008 by Lassetter Jr,John M, Chemistry Mgmt GGN

Affected Systems:
Affected Equipment:

Remarks:

Reference Type | Description	Reference Type | Description	Reference Type | Description
MISC : Conditions do not wa		

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 08/25/2008 by Lee,George H
Description: Assigned To: Chemistry Mgmt GGN

Significance Code: C
Classification Code: CORRECT/ADDRESS

CR-GGN-2010-00497

Significance: C
Operability:
Classification: CORRECT/ADDRESS
Date Discovered: 01/25/2010

Reportability: NOT REPORTABLE
CR Status: Open

Condition Summary:

GGNS National Pollutant Discharge Elimination System (NPDES) permit requires Outfall 016 be sampled twice per quarter. Outfall 016 receives ESC HVAC samples are obtained by ar outside vendor. Chemistry manages the vendor contract. On 1/25/2009 at 1449 it was determined that the vendor only completed one of two samples required during each of the third and fourth quarters on 2009. All other samples obtain during 2009 period were within compliance for this outfall as well as for the site pertaining to the NPDES permit.

Responsible Dept: Chemistry Mgmt GGN
Originated: 01/25/2010 by Shepphard Sr,Charles K., Chemistry Staff GGN

Affected Systems:
Affected Equipment:

Remarks:

Reference Type | Description	Reference Type | Description	Reference Type | Description
MISC : This CR does not wa		

CA&A Contact:

Closing Description:

Assignment Version: 1 Performed: 01/28/2010 by Jones,Michael D
Significance Code: C
Description: Assigned To: Chemistry Mgmt GGN
Classification Code: CORRECT/ADDRESS
HPER Level 2

Reportability Version: 1 Report Number:
Reportability Code: NOT REPORTABLE
Reportability Description:
Performed: 02/01/2010 by Jackson,Rita R

Not reportable - Discussed with environmental personnel and reviewed NUREG-1022.

10CFR50.72(b)(2)(xi) says, "Any event or situation, related to the health and safety of the public or on-site personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made. Such an event may include an on-site fatality or inadvertent release of radioactively contaminated materials." Per NUREG 1022, section 3.2.12, News Release or Notification of Other Government Agency, discusses that the purpose of the reporting requirement of 50.72(b)(2)(xi) is to "ensure the NRC is made aware of issues that will cause heightened public or government concern related to the radiological health and safety of the public or on-site personnel or protection of the environment." This event involved missed samples and NOT an unusual or abnormal release of radioactive effluents. Licensees generally do not have to report media and government interactions unless they are related to the radiological health and safety of the public or onsite personnel, or protection of the environment. Per NUREG 1022, if the event is routine and has little significance, an ENS notification is not needed.

The routine requirements for the missed NPDES samples for Outfall 016 were flow, ph and chlorine, all non-radiological parameters . Based on the fact that GGNS collected six of 8 required samples and noted that all other samples obtain during 2009 period were complete and within compliance for this outfall, as well as for the site pertaining to the NPDES permit. Other than communication with the Department of Environmental Quality to let them know about the missed samples, no other reports are planned or required. Chemistry will state the reason for missing the two results of the two quarters and any measures taken in the comment space at the bottom of the DMR Form. This event is routine in nature and has little significance.