

November 17, 2008

92-002-230

Ms. Maureen Essenthier (3WC22)  
U.S. Environmental Protection Agency  
1650 Arch Street  
Philadelphia, PA 19103

Mr. Ronald Brezinski  
PA Department of Environmental Protection  
Northeast Regional Office – 2 Public Square  
Wilkes-Barre, PA 18711

RE: Quarterly Progress Report No. 9  
Third Quarter 2008  
Marjol Battery Site, Throop, Pennsylvania

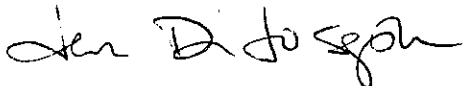
Dear Ms. Essenthier and Mr. Brezinski:

Enclosed please find Quarterly Progress Report No. 9 (Third Quarter 2008) for the Marjol Battery Site in Throop, Pennsylvania. This report is submitted as required by Section VI.L.3 of the Final Administrative Order on Consent which became effective on July 13, 2006.

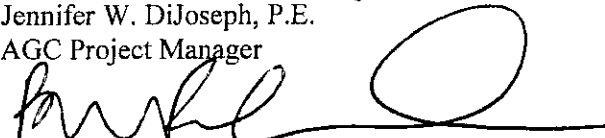
If you have any questions, please contact Barbara Forslund at (610) 840-9145 or Jen DiJoseph at (610) 840-9189.

Sincerely,

ADVANCED GEOSERVICES



Jennifer W. DiJoseph, P.E.  
AGC Project Manager



Barbara L. Forslund, P.E.  
AGC Project Coordinator

JWD:BLF:vm

Enclosures

cc: L. Ayers (2 copies)  
L. Cimini  
R. Moose  
J. Cronmiller  
R. DiPietro  
A. Doubleday  
L. Zelinka  
Throop Borough Council



**MARJOL BATTERY SITE  
QUARTERLY PROGRESS REPORT  
NO. 9**



**MARJOL BATTERY SITE  
QUARTERLY PROGRESS REPORT  
NO. 9**

*Prepared For:*

**GOULD ELECTRONICS  
Eastlake, Ohio**

*Prepared By:*

**ADVANCED GEOSERVICES  
West Chester, Pennsylvania**

**November 17, 2008  
92-002-230**

CERTIFICATION STATEMENT

I certify that the information contained in or accompanying Quarterly Progress Report No. 9 dated November 17, 2008 for the Marjol Battery Site in Throop, Pennsylvania is true, accurate and complete.

As to those portions of Quarterly Progress Report No. 9 for which I cannot personally verify their accuracy, I certify under penalty of law that this and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibilities of fines and imprisonment for knowing violations.

SIGNATURE:

*Thomas N. Rich*

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NAME:

Thomas N. Rich

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TITLE:

Chief Administrative Officer

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DATE:

November 17, 2008

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**QUARTERLY PROGRESS REPORT NO. 9**  
**MARJOL BATTERY SITE**

DATE: November 17, 2008 92-002-230

REPORTING PERIOD: Third Quarter 2008 (July 1 to September 30)

This document was prepared to satisfy quarterly progress reporting requirements in the Final Administrative Order on Consent (AOC) U.S. EPA Docket No. RCRA-03-2006-0041 CA effective July 13, 2006 between the United States Environmental Protection Agency (USEPA), Pennsylvania Department of Environmental Protection (PADEP) and Gould Electronics Inc. (Gould).

**ACTIONS DURING THIRD QUARTER 2008**

**PERMITTING AND DESIGN**

The following activities were accomplished during Third Quarter 2008:

- On June 25, 2008, Design Addendum No. 3 was issued regarding the anti-seep collars at the proposed basin.
- Design Addendum No. 2 for excavation at Pre-Design Investigation areas NW-24 and NW-25 was approved by PADEP as a Minor NPDES Permit Modification on July 2, 2008. Lackawanna County Conservation District (LCCD) approved Minor Permit Modification No. 2 (regarding Design Addendum No. 2) on July 23, 2008.
- The revised cost estimate through June 30, 2008 was issued on July 9, 2008.
- On July 14, 2008, Design Addendum No. 4 was issued regarding stockpile covers, excavation sequence, the outlet structure, anti-seep collars, and the location of silt fences 8a and 8b. LCCD approved Minor Permit Modification No. 3 (regarding Design Addendum No. 4) on July 23, 2008.
- Gould completed funding of the trust to \$14,117,574.65 by August 11, 2008.
- The Discharge Monitoring Report form was provided by PADEP on July 16, 2008. Discharge Monitoring Reports for July, August and September 2008 were issued on August 18, September 24 and October 23, 2008, respectively.
- Alternate procedures for proposed basin discharge were discussed at the July 29, 2008 Throop Borough Council meeting, and were issued as Design Addendum No. 5 on July 30, 2008. Responses to comments on Design Addendum No. 5 comments from USEPA were issued on August 15, 2008.
- A non-compliant discharge occurred on July 28, 2008 while dewatering the proposed basin. The discharge was discussed during the July 31, 2008 progress meeting. A non-compliant discharge report, as required by NPDES Permit No. PAI023508001, was issued on August 4, 2008 and amended August 7, 2008. Problem resolution procedures were issued on August 6, 2008 and were signed by Advanced GeoServices, SCE, and Drum Construction (an SCE subcontractor). A



copy of the signed procedures were provided to USEPA, PADEP and Throop Borough on August 11, 2008.

- Fence Permit Addendum No. 2 was submitted to Throop Borough on August 6, 2008 for installation of a gate between the Gould property line and the Ash Street right-of-way in the North Woods area. The gate will be installed by TEEM on behalf of Gould in an effort to stop dumping in that area. The addendum was approved by Throop Borough on August 14, 2008.
- On August 12, 2008, the title notice related to the Final Title Notice and the Regulated Fill Permit was submitted to USEPA and PADEP for review and approval.
- On August 21, 2008, PADEP issued a Consent Assessment of Civil Penalty to SCE regarding the non-compliant discharge on July 28, 2008.
- On September 15, 2008, Design Addendum No. 6 was submitted to replace the reinforced slope with a 2H:1V slope. Responses to comments from USEPA, PADEP and Throop Borough will be issued during Fourth Quarter 2008.
- On September 26, 2008, USEPA, PADEP and Cocciardi, on behalf of Throop Borough, concurred with suspending real-time monitoring during days when precipitation is adequate to keep excavations wet.

Table 1 provides the status of permit applications. Table 2 provides a summary of design addenda and permit modifications.

## **CORRECTIVE MEASURES CONSTRUCTION**

The following activities were accomplished during Third Quarter 2008:

- Survey Control of the Site by CMX Engineering began on May 15, 2008 and will continue throughout the project.
- Construction of the Proposed Sediment Basin began on June 17, 2008 and will be completed during the next quarter including the gabion baskets and check dams 7 and 15.
- Monitoring well, lysimeter and boring abandonment activities began on June 18, 2008 and were completed on July 14, 2008. The report for monitoring well, boring and lysimeter abandonment is provided on the enclosed CD.
- Construction of Containment Area (CA) Berm 2 began on June 25, 2008 and will be completed during the next quarter.
- Existing Sediment Basin dewatering in preparation for decommissioning began on June 25, 2008 and was completed the week of August 28, 2008.
- Clearing in the North Woods began on July 7, 2008. The majority of clearing was completed on July 22, 2008, and will continue during the next quarter.
- Eichelbergers Inc. began grouting of the existing basin discharge pipe on July 10 and completed it on July 14, 2008.
- Installation of the Proposed Sediment Basin Principal Spillway including the discharge pipe, endwall, anti-seep collars, and skimmer and rip rap apron began on July 10, 2008 and was completed on August 4, 2008.
- The temporary diversion berm to the north of the Proposed Sediment Basin was constructed on July 11, 2008.



- Utility location and abandonment within the facility began in the first quarter and was completed on July 14, 2008.
- Emergency Spillway construction began the week of July 15 and will be completed during the next quarter.
- Chain-link fence and high visibility fence was installed at the end of Franko Street on July 17, 2008.
- Removal of the existing basin discharge valve and endwall was completed on July 21, 2008.
- Clearing within the facility area began on May 28, 2008. The majority of clearing was completed on July 24, 2008 and will continue during the next quarter.
- On July 30, 2008, work was stopped by Advanced GeoServices due to a non-compliant discharge. Work activities resumed on August 1, 2008 with concurrence from USEPA, PADEP and Throop Borough.
- The skimmer at the Proposed Discharge Structure was tied into a vertical position to prevent discharge on August 5, 2008.
- Geotextile and riprap apron at the Proposed Sediment Basin discharge was completed on August 4, 2008.
- Excavation of Area S began on August 8 and was completed on August 12, 2008.
- Construction of a haul road through the Containment Area for use by trucks during waste placement was completed on August 12, 2008.
- Construction of an infiltration system for dewatering the Existing Basin began on August 12 and was completed on August 14, 2008. Stormwater runoff in the Exclusion Zone was allowed to accumulate in the western portion of the CA. It was collected and stored in a series of four frac tanks, and then allowed to infiltrate into the eastern portion of the CA through a network of PVC pipes. The system was used from August 14 to August 28, 2008.
- Backfill of Area S began on August 13 and was completed on August 14, 2008. Backfill in this Area will continue into the next quarter as the CA Berm is constructed.
- Relocation of the High Haz Stockpile began on August 13 and was completed on August 27, 2008.
- Permanent erosion control mat (ECM) installation at the Proposed Sediment Basin began on August 20 and was completed on August 27, 2008.
- A speed bump with signage on Delaware Street was installed on August 20, 2008.
- Drum Storage Area contents were segregated and drum contents (mainly battery casing material, drill cuttings, PPE and samples) emptied into the Containment Area on August 21, 2008. The drums were decontaminated and crushed from August 11 to 21, 2008. The drums were stored in a roll-off container and have not yet been recycled off-site.
- Construction of the access road around the Containment Area and Sediment Basin began on August 27, 2008 and will continue into the next quarter.
- Construction of a clean haul road through Area P began on August 27 and was completed on August 30, 2008.
- Mine fissure haul road construction began on August 27 and was completed on September 11, 2008.



- Construction of Diversion Berm 3E to the Containment Area Berm was completed on August 30, 2008. Diversion Berm 3W was constructed on September 26, 2008.
- Construction of the North Swale began the week of September 1, 2008 and will continue into the next quarter.
- Construction of the South Swale began on September 8 and will be continued during the next quarter.
- The water main running through the southern portion of the Site was damaged on September 12, 2008. Repair to the water main was completed by Pennsylvania American Water Company on September 17, 2008.
- The Exclusion Zone was redefined during the week of September 15, 2008. The clean areas surrounding the Containment Area to the southeast and west were delineated.
- The primary decon pad upgrade began on September 15 and was completed on September 17, 2008.
- Area G excavation began on September 17 and will be completed in the next quarter.
- Area F excavation began on September 23, 2008. Initial excavation was completed on September 24, 2008. Excavation of remaining contaminated material will be completed during the next quarter.
- Stabilization of the East Slope (3:1 slope adjacent to the Proposed Sediment Basin) including placing of seed and ECM was completed on September 23, 2008.
- Excavation of Area G inside the Containment Area berm was completed on September 26, 2008. On October 1, 2008, USEPA and PADEP provided notification that they were satisfied that the required isolation distance had been achieved.
- Relocation of the Low Haz Stockpile into Area G within the CA began on September 27, 2008 and will be completed during the next quarter.
- Two loads of non-hazardous construction debris from the Drum Storage Area were shipped off-site for disposal at Keystone Landfill on September 11 and 12, 2008. The total quantity disposed off-site was 12.43 tons.
- Personnel air monitoring was conducted periodically by SCE. Results are provided in the July 7, July 23, August 8, August 15, August 28 and October 2, 2008 daily QC reports.
- No decon water sampling was conducted this quarter as all decon water was re-used for dust control in contaminated areas.

Items provided on the web portal including construction schedules, daily QC reports, meeting minutes, and approved submittals are provided on the enclosed CD.

## **QUALITY ASSURANCE**

The following activities were accomplished during Third Quarter 2008:

- AGC continued to monitor construction activities throughout the quarter. Daily Field Reports are being included in the Daily Quality Assurance report.



- Daily erosion and sediment control inspections began on May 30, 2008 and continued throughout the quarter.
- On Monday June 30, 2008 PADEP notified AGC that turbidity levels for the Lackawanna River were significantly elevated. While performing the daily erosion and sediment control inspection, AGC visually inspected both upstream and downstream turbidity levels and determined that no erosion was leaving the Site and that all controls were in place and functional. The increased turbidity was attributed to upstream sources.
- On Tuesday July 1, 2008, Gannett Fleming and AGC performed a visual inspection of downstream and upstream turbidity.
- On July 24, 2008, AGC submitted an XRF Moisture Study on a 2 to 10 inch interval PDI sample. The report was revised on September 11, 2008 in response to USEPA comments.
- The daily Site Operations Meeting was initiated on August 1, 2008. AGC attended this meeting daily throughout the quarter. In some instances, the meeting was canceled based on Site activities.
- AGC performed XRF screenings to assist in the determination of the final depth of the excavation in Area S on August 8 and August 11, 2008. Area S confirmation sampling for lead was completed on August 13, 2008. Confirmatory soil sampling conducted during Third Quarter 2008 is summarized in Table 4. Confirmatory soil sample results are provided on the enclosed CD.
- A small opening (i.e., pothole) was discovered during construction of the mine fissure haul road. AGC discussed filling the opening with SCE's Health and Safety Officer and Quality Control Manager on September 2, 2008.
- AGC conducted an erosion and sediment control inspection on Tuesday September 9, 2008 after a very heavy rain event. USACOE notified AGC that they had completed an erosion and sediment control inspection as well. USACOE concurred with AGC's assessment that the BMP's were functioning and there was no release of sediment from the Site. USACOE observed increased turbidity in the Lackawanna River from upstream of the Site.
- AGC personnel were present to monitor the situation when the water line was broken on September 12, 2008. There was no sediment released from the Site and no impact to Sulphur Creek. SCE placed additional erosion control measures to assure that no sediment was released into Sulphur Creek. The additional measures were 12" silt socks and terra tubes. A 50 ft super silt fence was also placed downslope of the existing silt fence.
- AGC performed XRF screenings to assist in the determination of the final depth of the excavation in Area F on September 24, 29, and 30, 2008.
- Video and photo documentation of the complete removal of all BCM from Area G within the Containment Area was completed on September 26, 2008
- AGC demonstrated the process for XRF confirmation sampling in the SAP for representatives of USEPA, PADEP and Cocciardi on September 30, 2008.

Items provided on the web portal including daily QA reports and photographs are provided on the attached CD.



## MONITORING

The following activities were accomplished during Third Quarter 2008:

- The report for pre-construction baseline groundwater monitoring conducted in June 2008 is provided on the enclosed CD. Results indicate that total lead was below the performance standard of 15 µg/L.
- Weekly air monitoring continued at the Site, and the results show that the ambient air lead levels are well below the National Ambient Air Quality Standard of 1.5 µg/m<sup>3</sup>. PADEP continues to periodically split samples with Advanced GeoServices at high volume sampler locations #1 and #4. The Third Quarter 2008 Ambient Air Monitoring Report is attached.
- Real-time aerosol (dust) monitoring continued. Real-time air monitoring was conducted at two to six locations per day depending on Site activities. Non-working hour monitoring began on August 13, 2008. One-half hour average readings were collected until September 22, 2008. Beginning September 22, 2008, hourly average readings were collected. A summary of real-time monitoring is provided on the enclosed CD. The following exceedances occurred during working hour and non-working hour real-time monitoring this quarter:
  - On August 5, 2008, six, ½-hour averages exceeded the performance standard at the location east of the existing basin and downwind of disturbed battery casing material. No visible dust was present. The activity being monitored was dewatering of the existing sediment basin. All other monitors including the upwind monitor recorded similar data; however, the action levels in those areas was significantly higher. No additional action was required.
  - On August 21, 2008, three data points during non-working hours exceeded the performance standard at the location between the Containment Area and Sulphur Creek. The logging interval had changed to 60 seconds instead of 30 minutes. No work was being performed, and no wind was present. The location was not downwind of contaminated material.
  - During the non-working hour period of August 30 to September 2, 2008, one ½-hour average exceeded the performance standard at the location between the Containment Area and Sulphur Creek. The wind direction changed slightly before that ½-hour period. No disturbance was observed in the immediate vicinity of the air monitor.
  - On September 18, 2008, two ½-hour averages exceeded the performance standard at the location east of the Containment Area and downwind of material placement. No visible dust was present, humidity was recorded at 100%, and the work area was visibly moist. No additional dust suppression was required.
  - During the non-working hour period of September 20 to 22 and during working hours on September 22, 2008, several ½-hour average exceedances occurred at all monitors. No visible dust was noted. Additional watering was conducted on September 21, 2008, and readings did not decrease.



- During non-working hours on September 24, 2008, several ½-hour average exceedances occurred at two locations. Two collocated real-time monitors had different results: one monitor had an exceedance, the other did not. At arrival to the site, disturbed areas were still moist from previous water sprays and dew. No indication of windblown release was present.
  
- On August 15, 2008, a memo regarding additional air monitoring was submitted to USEPA and PADEP. Personal air monitors (PAMs) were collocated with real-time dust monitors on a daily basis downwind of the excavation and containment areas. Samples were analyzed for the first week of performing work in a new area or type of material. The PAM results were compared to the dust results to confirm that the immediate action levels are appropriate for the materials being excavated. If the levels were appropriate, remaining samples were archived with all information necessary to calculate an air lead level if the sample was analyzed. Archived samples were analyzed on days when dust monitors exceed the immediate action level. In addition, if any ½-hour average exceeds the action level for a given day, observation reading frequency were increased to every half-hour until the activity that was occurring during the exceedance is completed. When excavation is occurring in BCM, observation readings were also taken every 20 minutes downwind of the activity and at least three observation readings will be taken each time. Collocated PAM sampling began on August 7, 2008. Initially, SCE collected collocated PAMs on behalf of AGC. Beginning September 29, 2008, collocated PAMs were collected by AGC. A summary of collocated PAM air monitoring and laboratory data are provided on the enclosed CD.
  
- One collocated PAM sample from a location downwind of the Containment Area was above  $1.5 \mu\text{g}/\text{m}^3$  on September 24, 2008 (air lead level of  $1.7 \mu\text{g}/\text{m}^3$ ). A sample collected further downwind was below  $1.5 \mu\text{g}/\text{m}^3$  (air lead level of  $0.67 \mu\text{g}/\text{m}^3$ ). SCE was directed to water the Containment Area more frequently along with the active haul roads to the Containment Area.
  
- Second Quarter 2008 surface water and sediment sample results were received that show that the Site is not releasing lead to the River via stormwater discharges. The Second Quarter 2008 Stormwater Management Basin Performance Monitoring Report is provided on the enclosed CD.
  
- On July 3, 2008, Advanced GeoServices personnel collected Third Quarter 2008 sediment samples as required by the Final (100%) Design Sampling and Analysis Plan. One composite sample and a field duplicate were collected. The sample results were less than the calculated 95<sup>th</sup> upper confidence limit of the mean (52 mg/kg) for historic sample results at the mouth of Sulphur Creek. The Third Quarter 2008 Sediment Sampling Report is provided on the enclosed CD.
  
- On July 30, 2008 Advanced GeoServices personnel collected sediment samples from the Lackawanna River and splits of sediment samples collected by Cocciardi at Sulphur Creek in response to a non-compliant discharge from the Site on July 28, 2008. The lead concentration in the sample collected from the Lackawanna River was less than the calculated 95<sup>th</sup> upper confidence limit of the mean (52 mg/kg) for historic sample results at the mouth of Sulphur Creek. The lead concentrations in Sulphur Creek sediment samples were less than the 500 mg/kg



performance standard for lead. The results from this additional sampling are included with the Third Quarter 2008 Sediment Sampling Report provided on the enclosed CD. A non-compliant discharge report, including preliminary sample results, was submitted to PADEP, USEPA, Throop Borough, Cocciardi, LCCD, and SCE on August 4, 2008 (amended August 7, 2008).

- With the exception of the aforementioned discharge event, no discharge occurred from the Proposed Sediment Basin during Third Quarter 2008. Discharge Monitoring Reports were prepared for July, August and September 2008, and are included in the Third Quarter 2008 Sediment Sampling Report provided on the enclosed CD.
- Precipitation for July, August, and September 2008 was 4.47", 3.47", and 4.87" respectively in the form of rain.
- No 10-year storms (3.68 inches of rainfall within a 24 hour period) occurred during the third quarter.

## **SITE MAINTENANCE**

The following activities were accomplished during Third Quarter 2008:

- TEEM Environmental was off-site during July, August, and September 2008 to perform the following maintenance activities.
  - Cut/trim grass at residential areas adjacent to Site and slope near main entrance.
  - Cut/trim tree line on Woodlawn from main gate to Sulphur Creek gate.
  - Investigate complaints of tents in North Woods.
  - Installation of no trespassing/private property signs at North Woods.
- Securitas Security (f/k/a Burns Security) continued to patrol the perimeter fence on a weekly basis until June 23, 2008. Perimeter fence patrols continued on weekends through the remainder of the quarter, and generally included viewing the perimeter from Woodlawn Street and Franko Street. A daily perimeter inspection is also conducted by AGC and SCE.

## **COMMUNITY RELATIONS**

The following activities were accomplished during Third Quarter 2008:

1. Throughout the third quarter 2008, Gould's web site, <http://www.marjolcleanup.com>, for the Marjol Battery Site was updated almost daily with the real-time and perimeter air monitoring data, photos, and the weekly construction schedules. A notification was sent to those individuals who signed up for web-site update notices each time the web site was updated.
2. On July 1, 2008, the residents living on the west side of Martarano Drive were contacted regarding the schedule for tree clearing in the area behind the homes. Individual meetings were held with several of the residents to discuss specific tree removal requests.



3. On July 2, 2008, the Throop Borough Council president, fire chiefs, police chief, chief clerk, and streets commissioner were notified of the evacuation drill that would take place on July 3, 2008. Calls were also made to residents living in the immediate vicinity of the Site and door knockers were posted at the homes in the immediate area. Additionally, a banner was posted on the web site notifying everyone of the evacuation drill.
4. A flyer encouraging residents to stay out of the North Woods excavation area was sent out to Throop residents on the mailing list on July 5, 2008, in an attempt to deter residents from walking/riding in that area especially during the construction activities. The concern for people being in that area was also discussed with the Throop Borough Council President and a banner was posted on the web site asking residents to stay out of the North Woods area especially during the construction activities.
5. The resident living at 1026 Martarano Drive contacted Advanced GeoServices, on July 5, 2008, to report dumping of construction debris in the area behind his home in the North Woods. A police report was filed.
6. Marjol Battery Site Newsletter Number 89 was mailed out on July 7, 2008. The following primary topics were covered in the newsletter:
  - Information on Implementation of the Final Remedy
  - Annual Blood Lead Screening Program
  - Long Term Project Schedule
  - Completed Site Preparation Activities
  - Current and Upcoming Construction Activities
  - Dust Control and Air Monitoring
7. On July 7, 2008, flyers were sent to those on the mailing list reminding everyone of the Annual Blood Lead Screening Program.
8. On July 7, 2008, letters were sent to local churches, PTA's, and Day Care facilities regarding the Annual Blood Lead Screening Program.
9. On July 7, 2008, letters were sent to the Throop Borough Emergency Responders inviting them to participate in the annual blood lead screening program as part of the medical surveillance program that began in October 1999.
10. On July 8, follow-up letters for the Annual Blood Lead Screening Program were sent to the residents who did not respond to the initial June 30<sup>th</sup> letter regarding in-home blood lead screening.
11. Throop Borough Council's July 8, 2008, Mid-Month Meeting was cancelled.
12. On July 9, 2008, a letter was sent to Throop Borough regarding the hook up of electricity to the Borough's trailer located at the Marjol site.



13. On July 9, 2008, a consent form for excavation was obtained from the resident living at 1020 Martarano Drive. The consent was obtained because the fence at the rear of his property is located approximately 1 foot inside of his property line and excavations will be conducted to the fence in that area.
14. The door-to-door part of the annual blood lead screening program was conducted on July 14, 2008.
15. On July 14, 2008, a second group of flyers were sent to those on the mailing list reminding everyone of the Annual Blood Lead Screening Program.
16. On July 15, 2008, Representative Frank Shimkus and two of his interns visited the Marjol Site. This was an unscheduled visit. Rep. Shimkus and his interns briefly viewed the Site from the area of the guard trailer and then left.
17. On July 16, 2008, a meeting was held with Throop Borough's engineer (BCM), Throop Borough's Streets Commissioner, and Advanced GeoServices regarding the access road to Throop Borough's 48 acres and the necessary NPDES permits required for use of the fill material on the Borough's 48 acres.
18. On July 16, 2008, the Throop Borough Council President was contacted regarding placement of a barrier at the end of Franko Street to secure the construction area as activities continue north and to prevent any further dumping in that area. It was discussed that jersey barriers would eventually be placed in that area; but in the interim, it was agreed that temporary chain link fencing with orange high visibility fencing would be placed across the top of Franko Street to deter access into the North Woods area.
19. On July 16, 2008, the residents living on the west side of Martarano Drive were again contacted regarding the schedule for tree clearing in the area behind the homes. Individual meetings were held with several of the residents to discuss specific tree removal requests.
20. On July 18, 2008, Drum Construction submitted a notice to Throop Borough Council informing them that it had made an application to PADEP for installation of a jaw crusher on the Marjol Site.
21. Blood lead screening was conducted in the Throop Borough Civic Center on July 16, 2008 and July 19, 2008. Thirty-six individuals participated in the annual blood lead screening program this year.
22. On July 28, 2008, a letter was provided to Throop Borough regarding the real-time air monitoring that is taking place at the Site during construction activities.
23. On July 29, 2008, Throop Borough was notified of the discharge incident that occurred on July 28, 2008. A letter summarizing the incident and providing interim procedures for discharging from the new basin was provided to Throop



Borough on July 29, 2008. A summary of the July 28, 2008 incident was posted on the Marjol web site on August 2, 2008.

24. Advanced GeoServices on behalf of Gould attended Throop Borough's July 29, 2008, Throop Borough Council Work Session to discuss construction activities at the Marjol Site. (See notes on the enclosed CD.)
25. Lisa Ayers attended the regularly scheduled Throop Borough Council Monthly Meeting that followed the Work Session on July 29, 2008. (See notes on the enclosed CD.) At this meeting, Throop Borough tentatively hired Cocciardi and Associates, Inc. as its compliance Liaison for the Marjol Battery Site.
26. On July 29, 2008, a meeting was held with the resident at 1020 Martarano Drive to discuss the excavation area behind his property and the fencing on his property.
27. The property owner at 1030 Martarano Drive was contacted on July 29, 2008, regarding placement of security fencing on his property in order to secure the work area in the North Woods.
28. On July 30, 2008, Cocciardi provided all necessary Health and Safety certifications required for access to the Marjol site. A Health and Safety briefing for Cocciardi employees was provided by the site Health and Safety Officer.
29. On July 30, 2008, Cocciardi was provided access to the web portal for the Marjol site.
30. As requested by Throop Borough, on July 30, 2008, Throop Borough's compliance liaison Cocciardi & Associates, collected grab samples of sediment in Sulphur Creek in response to the incident on July 28, 2008. Advanced GeoServices Corp. on behalf of Gould Electronics collected split samples from this sampling. The data collected by Gould for this sampling event was shared with Throop Borough and Cocciardi.
31. Throop Borough Councilman, Ray Jarosh, was provided a site tour on July 30, 2008.
32. The July 31, 2008, weekly Progress Meeting was changed to a Problem Resolution Meeting and took place at the Marjol Community Relations Office. In addition to representatives from Gould, AGC, SCE, USEPA, PADEP, and Throop Borough being present, representatives from Rep. Shimkus's office, resident Joe Keyasko, and the press attended the meeting. Minutes from the meeting were posted on the web portal and a copy was provided to Throop Borough. The Scranton Times requested and was permitted to take pictures from the support zone following the meeting.
33. Throop Borough was immediately notified regarding a communications lapse and above-standard dust readings on August 4, 2008. Information regarding this incident was posted on the Marjol web site as well. Throop Borough and



Cocciardi were provided copies of all air data information that had been posted on the web portal as of August 7, 2008. The Quality Assurance report for August 4, 2008, was also provided to Throop Borough.

34. Copies of the Site Specific Health and Safety Plan were provided to Throop Borough and Throop Borough's emergency responders on August 5, 2008.
35. The Throop Borough Police Chief was contacted on August 6, 2008 to ask for assistance with Gould's efforts to keep people out of the work area in the North Woods; in particular off of Martarano Drive.
36. A WNEP TV reporter came to the Marjol Site on August 6, 2008. He was referred to Maureen Essenthier, USEPA.
37. A complaint was received from a Throop Borough Councilman on August 7, 2008, regarding employees speeding on Delaware Street especially at lunch time. SCE was notified of the complaint.
38. Advanced GeoServices Corp, on behalf of Gould, contacted the resident at 452 Delaware Street on August 11, 2008 and requested that they park on only one side (the southern side) of the Street for safety reasons due to the large trucks coming in and out of the Site.
39. A meeting was held with the resident at 1022 Martarano Drive to discuss the excavation area behind his property on August 12, 2008.
40. Advanced GeoServices, on behalf of Gould, attended Throop Borough's August 12, 2008, Throop Borough Council Work Session to discuss construction activities at the Marjol Site. (See notes on the enclosed CD.)
41. Advanced GeoServices, on behalf of Gould, attended Throop Borough's August 12, 2008, Throop Borough Council Special Monthly Meeting. (See notes on the enclosed CD.) At the meeting, Throop Borough passed a motion accepting the proposal from Cocciardi & Associates (Cocciardi) to be the Borough's compliance liaison pending approval by the Borough's solicitor.
42. Speeding concerns raised by Throop Borough Councilmen were brought to SCE's attention on August 13, 2008. SCE asked if they can install a temporary speed bump on Delaware Street just above Hill Street heading toward the Site. Throop Borough Councilman, Ray Jarosh, was present for the operations meeting discussion regarding the speed bump and discussed it with the Throop Borough Streets Commissioner. Additionally, Advanced GeoServices contacted the Throop Borough Council President and the Borough's Chief Clerk regarding the speed bump.
43. A complaint was received on August 14, 2008, from the Throop Borough Council President regarding trucks from the Site entering onto Rte. 347 without yielding. The complaint was brought to SCE's attention.



44. On August 15, 2008, Throop Borough notified Advanced GeoServices that SCE could install the speed bump on Delaware Street as requested. AGC notified SCE that permission was granted from Throop Borough and the speed bump was installed on August 20, 2008.
45. Advanced GeoServices began posting overnight air monitoring data on the web site on August 18, 2008.
46. On August 22, 2008, Advanced GeoServices notified Throop Borough of an action level exceedance on one of the dust air monitors. There was no work being done at the time, the ground was wet, and the air monitor was in a non-contaminated area so no action was taken.
47. SCE shored up Throop Borough's trailer on August 22, 2008, and agreed to put tie downs on the trailer. The tie downs were provided by Throop Borough.
48. On August 23, 2008, Advanced GeoServices contacted the resident at 1030 Martarano Drive regarding installation of temporary fencing on/near his property.
49. Advanced GeoServices attempted on several occasions during the week of August 25, 2008, to contact the residents at 800 and 804 Woodlawn Street regarding the installation of the clean fill haul road near the Woodlawn Street gate. Notes were left at the two properties providing information on the activities at the Woodlawn Street gate area and asking the residents to contact the Community Relations Representative with their telephone numbers if they would like to be notified of future activities in that area.
50. On August 26, 2008, Advanced GeoServices contacted the residents on Delaware Street regarding an increase the truck traffic on Delaware Street due to the importing of structural fill material.
51. On August 26, 2008, Advanced GeoServices on behalf of Gould attended the Throop, Throop Borough Council Work Session to discuss construction activities at the Marjol Site. (See notes on the enclosed CD.)
52. Advanced GeoServices, on behalf of Gould, attended Throop Borough's August 26, 2008, Throop Borough Council Monthly Meeting. (See notes on the enclosed CD.) At that meeting, it was noted that Cocciardi & Associates was officially hired by Throop Borough as liaison for the Marjol Site. Throop Borough Council requested that Gould's Community Relations Representative contact Cocciardi daily following the operations meetings to inform Cocciardi of the activities scheduled for the next day.
53. As requested by Throop Borough, beginning August 27, 2008, Advanced GeoServices has provided a summary of the next day's activities to Cocciardi on a daily basis other than on days when a Cocciardi representative has attended the daily operations meeting.



54. On August 27, 2008, Throop Borough and Cocciardi were notified when discolored soil was discovered while constructing the haul road to the mine fissure area. Advanced GeoServices kept in contact with Cocciardi throughout the morning of August 28, 2008, and contacted Throop Borough Council once it was determined that the material was fill from previous residential excavations.
55. On Friday, August 29, 2008, Advanced GeoServices notified Throop Borough and Cocciardi of the new mine fissure that was discovered going across the mine fissure haul road that SCE was constructing in order to access the large mine fissures.
56. On September 2, 2008, Advanced GeoServices notified Throop Borough and Cocciardi of a half-hourly average action level exceedance on one of the dust air monitors that occurred on August 30, 2008. The alarm on one of the other dust monitors had also gone off for one minute on August 30, 2008, but none of the half hourly averages for that dust monitor were above the action level. Throop Borough and Cocciardi were also informed of the alarm going off. There was no work being performed on August 30, 2008.
57. Throop Borough provided the tie downs for its trailer to SCE on September 3, 2008, and SCE agreed to place the tie-downs on the trailer.
58. On September 3, 2008, the resident at 452 Delaware Street was notified of increased truck traffic beginning that week.
59. Mike Bedrin, Gary Greenfield, and Mark Carmon from PADEP visited the Site on September 4, 2008.
60. Advanced GeoServices began putting the co-located sample lead data on the web site on September 3, 2008.
61. On September 9, 2008, Advanced GeoServices notified Throop Borough and spoke with Cocciardi regarding ponding water in the drainage channel on-site following heavy rains in the morning. This was also discussed by Advanced GeoServices at Throop Borough Council's Work Session that evening.
62. On September 9, 2008, a meeting was held with Throop Borough's engineer (BCM), Throop Borough's Streets Commissioner, and Advanced GeoServices regarding the access road to Throop Borough's 48 acres and the necessary NPDES permits required for use of the fill material on the Borough's 48 acres.
63. Advanced GeoServices on behalf of Gould attended Throop Borough's September 9, 2008, Throop Borough Council Work Session to discuss construction activities at the Marjol Site. (See notes on enclosed CD.)
64. Advanced GeoServices, on behalf of Gould, attended Throop Borough's September 9, 2008, Throop Borough Council Special Monthly Meeting. (See



notes on enclosed CD.) A motion was passed at that meeting for the Throop Borough Council President to sign a release for the Borough's trailer at the Site.

65. The Throop Borough Streets Commissioner contacted Advanced GeoServices on the morning of September 10, 2008, regarding mud coming off of one of the dump trucks as it was leaving the Site. SCE was already addressing the issue when Advanced GeoServices investigated the situation and SCE took extra measures throughout the day to ensure that trucks leaving the Site were cleaned off before going onto Borough roads. Advanced GeoServices contacted the Throop Borough Council President to let him know of the situation and to tell him that it had been addressed.
66. On September 12, 2008, Advanced GeoServices notified Throop Borough that the water line at the Site had been pierced. (Cocciardi was also contacted, but they were already at the Site and aware of the incident.) Advanced GeoServices spoke with several Throop Borough Councilmen that day and kept the Borough and Cocciardi informed on the status of the repairs to the water line. In addition to notifying Throop Borough, Advanced GeoServices met with the residents on Delaware Street to let them know about the water line and posted a notice on the web site to inform people of the incident.
67. On September 12, 2008, Advanced GeoServices notified the residents on Delaware Street that there would be import trucks bringing in fill material (increased truck traffic) on Saturday, September 13, 2008.
68. On September 15, 2008, Advanced GeoServices discussed with and then provided the Throop Borough Council President with a copy of the off-site import fill submittal from SCE from the web portal.
69. As requested, on September 17, 2008, a copy of the Quality Assurance report from September 12, 2008, was provided to PADEP.
70. On September 18, 2008, as requested, Advanced GeoServices contacted the Throop Borough Council President regarding instantaneous dust monitor readings above the action level. As requested by Council President, Advanced GeoServices also contacted the Throop Borough Chief Clerk regarding the dust monitor readings.
71. On September 18, 2008, a signed release to install a trailer at the Site was provided by Throop Borough to Gould.
72. On September 19, 2008, Representative Shimkus, the Mayor of Throop, a Throop Borough Councilman, the Throop Borough Zoning Officer, and a newspaper photographer visited the Site. Representatives from Advanced GeoServices met with the visitors, showed them one of the dust monitors that is being used at the Site, and addressed their questions. Copies of recent perimeter high volume air sampler data, September 18, 2008 overnight dust monitor data, and lead data from



the laboratory for samples collected overnight September 17, 2008, were provided to Rep. Shimkus as requested.

73. On September 20, 2008, the resident at 452 Delaware Street contacted Advanced GeoServices regarding a personal matter related to Site clean-up activities. Advanced GeoServices contacted USEPA regarding the matter and referred the resident to USEPA.
74. As requested, Advanced GeoServices notified Throop Borough and Cocciardi of both instantaneous and half-hourly/hourly dust averages that were above the action level on September 19, 20, 21, 22, 24, and 25, 2008. Advanced GeoServices also informed and provided copies of air lead data for samples collected during these periods when instantaneous or half-hourly/hourly averages occurred on the dust monitors to Throop Borough and Cocciardi. Additionally, data comparing dust monitor readings with humidity was provided to Cocciardi for review.
75. As discussed with the Throop Borough Council President, AGC began providing morning summaries on how the air monitors ran overnight on a daily basis (weekdays) to Cocciardi beginning on Saturday, September 20, 2008.
76. On September 22, 2008, an unscheduled meeting with representatives from Cocciardi, Throop Borough, and Advanced GeoServices took place regarding the dust monitors and dust monitor results at the Site.
77. On September 22, 2008, a meeting/conference call was held with Throop Borough, Cocciardi, USEPA, PADEP, USACOE, and Advanced GeoServices regarding the dust monitors and dust monitor results at the Site.
78. On September 24, 2008, copies of recent air lead results from the September 19 to 25, 2008 period when the dust monitors at the Site had results above the action level were provided to both Throop Borough and to Rep. Shimkus as requested.
79. On September 25, representatives from Gould and Advanced GeoServices met with the Throop Borough Council President regarding the haul road to Throop's Borough's 48 acres and the necessary permits for use of the fill material on the Borough's 48 acre property.
80. On September 26, 2008, a follow-up conference call/meeting regarding the dust monitors and the dust monitor results being used to monitor activities at the Site was held with Throop Borough, Cocciardi, PADEP, USEPA, and Advanced GeoServices.
81. As requested, on September 29, 2008, Advanced GeoServices notified Throop Borough and Cocciardi of two dust monitor alarms that went off on September 28, 2008.



82. Advanced GeoServices on behalf of Gould attended Throop Borough's September 30, 2008, Throop Borough Council Work Session to discuss construction activities at the Marjol Site. (See notes on the enclosed CD.)
83. Advanced GeoServices, on behalf of Gould, attended Throop Borough's September 30, 2008, Throop Borough Council Monthly Meeting. (See notes on the enclosed CD.)

## **SCHEDULE AND PERCENT COMPLETE**

The attached CMI Schedule (Table 3) has been updated with actual dates on which the tasks were accomplished and corresponding revisions to the projected completion dates. Based on the Revised Cost Estimate through June 30, 2008, the CMI is approximately 24% complete.

## **PROBLEMS ENCOUNTERED**

A non-compliant discharge occurred on July 28, 2008 while dewatering the proposed basin. The discharge was discussed during the July 31, 2008 progress meeting. A non-compliant discharge report, as required by NPDES Permit No. PAI023508001, was issued on August 4, 2008 and amended August 7, 2008. Improvement of communications was identified as a solution to the issue, and problem resolution procedures were issued on August 6, 2008 and were signed by Advanced GeoServices, SCE, and Drum Construction (an SCE subcontractor). A copy of the signed procedures was provided to USEPA, PADEP and Throop Borough on August 11, 2008.

## **PERSONNEL CHANGES**

On July 31, 2008, the Contractor's QC Manager was changed from Steve Wheeler to Chris Jacangelo.

## **ACTIONS PLANNED FOR FOURTH QUARTER 2008**

### **PERMITTING AND DESIGN**

The following activities are planned for Fourth Quarter 2008:

- Submit the title notice related to the Final Title Notice and the Regulated Fill Permit.
- Submit the Regulated Fill Permit.
- Submit and obtain LCCD acceptance of Minor NPDES Permit Modification No. 4 regarding Design Addendum No. 6.

### **CORRECTIVE MEASURES CONSTRUCTION**

The following activities are planned for Fourth Quarter 2008:

- Completion of west CA Berm (Berm 2).
- Construct the 2H:1V slope and restore disturbed areas.



- Completion of Low Haz Stockpile removal and placement in the Containment Area.
- Excavate and restore the North Woods. Place excavated material in the Containment Area.
- Construction of North Woods Diversion Berm.
- Excavate Areas T, U and M and place in the Containment Area. Restore excavations.
- Excavate and restore access at Delaware Street.
- Construction of the alternate Support Zone.
- Construct East Diversion Berm 11.
- Excavate Areas L, I, J and K and place in the Containment Area. Restore excavations.
- Completion of North and South Swales.
- Excavate Areas O, N, Q, P and R and place in the Containment Area. Restore excavations.
- Remove Diversion Berm 3E.
- Install temporary cap at Containment Area.
- Apply temporary or permanent seed at disturbed areas.

Completion of some of these activities is weather dependent.

## **QUALITY ASSURANCE**

The following activities are planned for Fourth Quarter 2008:

- Continue observation of construction activities and photo-documentation.
- Continue daily erosion and sediment control inspections.
- Continue confirmatory soil sampling.
- Conduct pre-demobilization inspection to confirm BMPs are appropriate for demobilization.

## **MONITORING**

The following activities are planned for Fourth Quarter 2008:

- Continue weekly perimeter air monitoring program in accordance with the Sampling and Analysis Plan. Perimeter air lead sample results will be compared to both the current standard and the new standard of  $0.15 \mu\text{g}/\text{m}^3$  (effective October 2009).
- Continue real-time air monitoring with collocated PAMs in accordance with the Sampling and Analysis Plan and August 15, 2008 memo.
- Perform Fourth Quarter 2008 river sediment monitoring in accordance with the Sampling and Analysis Plan.
- Perform daily basin discharge monitoring and monthly sampling and lead analysis in accordance with the Sampling and Analysis Plan.
- Submit results for the Fourth Quarter 2008 Ambient Air Monitoring Report.
- Submit results for Fourth Quarter 2008 river sediment monitoring.



## SITE MAINTENANCE

The following activities are planned for Fourth Quarter 2008:

- Continue off-site maintenance activities such as mowing.

## COMMUNITY RELATIONS

The following activities are planned for Fourth Quarter 2008:

- **October through December, 2008** - Continue to regularly update the Marjol web site with air monitoring data, photos, and the weekly construction schedules.
- **October through December, 2008** - Continue to provide daily summaries to Cocciardi & Associates regarding the overnight air monitoring.
- **October through December, 2008** - Continue to provide the schedule for the next day's activities to Cocciardi on a daily basis whenever Cocciardi does not attend the daily progress meetings.
- **October through December, 2008** - Continue to notify Throop Borough and Cocciardi of any hourly or instantaneous action level exceedances on the dust monitors or any incidents where the dust monitors do not run properly. Throop Borough and Cocciardi will also be notified of any incidents where a work area air lead sample result is above the current National Ambient Air Quality Standard of 1.5 ug/m<sup>3</sup>. Perimeter air lead sample results will be compared to both the current standard and the new standard of 0.15 µg/m<sup>3</sup> even though it is not effective until October 2009.
- **October 2008** - Provide Throop Borough with a copy of the Responses to Design Addendum No. 6 Comments.
- **October 6, 2008** - Send out Marjol Battery Site Newsletter Number 90 providing an update on construction activities.
- **October 14, 2008** - Attend Throop Borough Council's Mid-Month Work Session and Meeting to provide an update to Throop Borough Council.
- **October 30, 2008** - Attend Throop Borough Council's Monthly Work Session and Meeting to provide an update to Throop Borough Council.
- **November 12, 2008** - Attend Throop Borough Council's Mid-Month Work Session and Meeting to provide an update to Throop Borough Council.
- **November 21, 2008** - Send out Marjol Battery Site Newsletter Number 90 providing an update on construction activities.

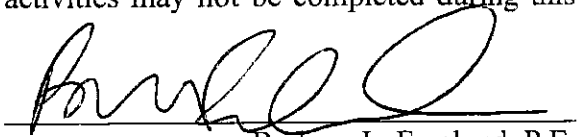


- **November 25, 2008** - Attend Throop Borough Council's Monthly Work Session and Meeting to provide an update to Throop Borough Council.
- **December 9, 2008** - Attend Throop Borough Council's Mid-Month Work Session and Meeting to provide an update to Throop Borough Council.
- **December 30, 2008** - Attend Throop Borough Council's Monthly Work Session and Meeting to provide an update to Throop Borough Council.

#### ANTICIPATED PROBLEMS

Delay in USEPA and PADEP approval of the draft title notice will delay submission of the Regulated Fill Permit and use of the Throop Borough borrow materials at the Site.

The project is currently behind schedule. Phase I activities may not be completed during this construction season.

  
Barbara L. Forslund, P.E.  
AGC Project Coordinator

cc: Lisa Ayers, AGC  
James Cronmiller, Gould  
Leonard Zelinka, PADEP  
Adam Doubleday, AGC  
Roger Moose, GF

Throop Borough Council  
Louis Cimini, Throop Borough Solicitor  
Ron Brezinski, PADEP  
Repository (c/o Lisa Ayers)  
Rocco DiPietro, Cocciardi

TABLE 1  
Marjol Corrective Measures Implementation  
Permitting Timeline

Permit Name	Earliest Design Stage When Submitted	Entity Applying for the Permit	Permitting Agency	Time for Processing and Review <sup>1</sup>	Permit Expiration	Pre-Construction Notification	Completion Activities	Date Submitted	Date Approved
Individual NPDES Permit (PAI023508001)	At completion of 90% Design	AGC	LCCD	30 days General; 120 days Individual	5/8/2013; Renewal due 180 days prior to expiration.	30-day public comment period published 3/8/2008. Public hearing held 4/16/2008. LCCD was notified of the pre-construction meeting on 4/18/08.	Submit Notice of Termination within 7 working days after final stabilization is achieved.	12/26/2007 General; 1/31/2008 Individual	2/14/2008 Administratively complete; permit issued 5/9/2008
Wetlands Waiver	At completion of 30% Design	AGC	PADEP	130 days	No expiration.	PA Fish & Wildlife notified 4/21/2008	None required.	8/3/2007	9/4/2007
Air Permit Request for Determination - Solidification	At completion of 30% Design	AGC	PADEP	30 days	No expiration.	Notify 2 weeks prior to start of solidification	None required.	8/17/2007, Revision submitted 9/13/2007	10/22/2007
Air Permit Request for Determination - Passive Gas Vent	At completion of 90% Design	AGC	PADEP	30 days	No expiration.	None required.	None required.	11/13/2007; 2/20/2008 revisions; 4/24/2008 electronic submission of 2/20/2008 revision	12/18/2007; revision approved 4/28/2008
Regulated Fill General Permi	After approval of other permits	AGC	PADEP	Approx. 60 days	Begin work within 1 year.	None required.	Submit proof of recorded deed notice to PADEP.		
Fence Permit (08-1001)	At completion of 90% Design	AGC	Throop Borough	Approx. 60 days	1 year from issue unless work has begun. Work must be complete in 2 years from issue. Renewal due 60 days prior to expiration.	Zoning Officer notified 4/21/2008.	Zoning Officer inspection.	12/14/2007; amended 5/21/2008; amended 8/6/2008	1/24/2008; 5/27/2008; 8/14/2008
Preliminary Land Development Plan	At completion of 90% Design	AGC	Throop Borough	Approx. 100 days	3 years from issue. 1 year extension request due 90 days prior to expiration.	None required.	None required.	12/5/07 (Borough); 12/10/07 (LCRPC)	12/10/07 (LCRPC, no review); Planning Commission approval 5/5/2008
Stormwater Management Plan	At completion of 90% Design	AGC	Throop Borough	Approx. 150 days	No expiration.	None required.	Provide notification to Borough Engineer when complete. Inspection by Borough Engineer.	12/5/07 (Borough); 12/10/07 (LCRPC)	12/10/07 (LCRPC, no review); R. Nitch letter received 4/25/2008; Planning Commission approval 5/5/2008
Building Permit (if applicable)	At completion of 90% Design	AGC	Throop Borough	To be determined	Begin work within 6 months of issue. Expires 12 months from issue.	None required.	None required.	n/a	6/24/2008
Trailer Occupancy (Special Exemption Use)	After contractor selection	Contractor	Throop Borough	Approx. 60 days	2 years from issue.	Notify Zoning Officer prior to use.	None required.	Discussed at preconstruction meeting 4/29/2008	5/1/2008

NOTE:

1. Review time begins when application is administratively complete.
2. Because of the extensive clearing and grading activities, the Preliminary Land Development Plan will be submitted to Throop Borough which requires a review by the Planning Commission and Engineer. Gould will work with the Borough to mitigate the impact on the schedule.

Table 2  
 DESIGN ADDENDUM SUMMARY  
 Marjol Battery Site

Addendum No.	Description	Submission Date	USEPA/PADEP Approval Date	Applicable Permit Revision (if any)					Change Order		
				Permit	Submission Date	Description	Receiving Party	Approval Date	No.	Submission Date	Approval Date
n/a	Change super silt fence to 24 inch silt soxx	5/23/2008	n/a	NPDES	5/23/2008	Minor Modification	LCCD	5/27/2008	n/a	5/23/2008	5/23/2008
n/a	Add permanent fence at low area at North Woods	5/21/2008	n/a	Fence	5/21/2008	Permit Addendum	Throop Borough	5/27/2008	n/a		
1	Immediate Action Level for real-time monitoring at non-contaminated areas	6/4/2008	6/9/2008	n/a	n/a	n/a	n/a	n/a	n/a		
n/a	Install temporary 6 ft chain link fence at south and west facility boundary	6/6/2008	n/a	n/a	n/a	n/a	n/a	n/a	1	6/17/2008	6/23/2008
2	Excavation at NW-24 and NW-25	6/24/2008	7/2/2008	NPDES	6/25/2008	Minor Modification No. 2	LCCD	7/23/2008			
3	Anti-seep collar location	6/25/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Alternate grout for boring abandonment	7/1/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	Stockpile cover, Excavation Sequence, Outlet Structure, Anti-Seep Collar, SS-8a & 8b location	7/14/2008	n/a	NPDES	7/3/2008, drawings 7/14/08	Minor Modification No. 3	LCCD	7/23/2008	n/a	n/a	n/a
5	Interim Proposed Basin Discharge procedures	7/30/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Extend toe of slope due to existing grade. Additional clearing, silt sock relocation, temporary fence relocation	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2	8/4/2008	8/6/2008
n/a	Gate at Ash Street extension	8/6/2008	n/a	Fence	8/6/2008	Permit Addendum No.2	Throop Borough	8/14/2008	n/a	n/a	n/a
n/a	Problem Resolution Procedures	8/6/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Collocated PAM monitoring, increased observation readings for real-time TSP	8/15/2008	n/a	n/a	n/a	n/a	n/a	n/a	5	9/8/2008	9/9/2008
n/a	Survey at additional North Woods Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3	8/26/2008	8/26/2008
n/a	Existing Basin Dewatering System	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6	9/11/2008	9/11/2008
n/a	Additional T&M rate sheet	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7	9/12/2008	9/25/2008
6	Change reinforced slope to 2:1 slope	9/15/2008	10/2/2008	NPDES	pending	pending	LCCD	seed 10/20/08			
n/a	Costs for terra tubes and Pond Clear	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8	9/15/2008	9/30/2008
n/a	Re-establish Exclusion Zone	9/21/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Suspend real-time during days with precipitation	9/26/2008	9/26/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Revisions to subcontractor documentation and invoice procedures	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4	9/30/2008	10/8/2008

**TABLE 3  
CORRECTIVE MEASURES IMPLEMENTATION SCHEDULE  
THIRD QUARTER 2008**



Estimated time for construction is 17 months of construction with minimum winter shutdown of 120 days (December through March).

Milestone			Projected Dates from CMI		Actual Dates
			Work Plan	Revised Projected Dates	
1)	Restart Letter Received	Actual	9/19/2005	n/a	9/19/2005
2)	Notice on Dispute	Actual	9/26/2005	n/a	9/26/2005
3)	Consent Order Rec'd	Actual	12/1/2005	n/a	12/1/2005
4)	Consent Order Signed	Actual	7/13/2006	n/a	7/13/2006
5)	Proj. Coord. And Consultant Notice	In Order	7/13/2006	n/a	7/13/2006
6)	Title Notice Submitted	due 30 days after 4)	8/14/2006	n/a	8/14/2006 (Draft submitted) 5/29/2007 (approved) 6/4/2007 (reordered)
7)	Cost Estimates Submitted	due 30 days after 4)	8/14/2006	n/a	8/14/2006*
8)	CMI Work Plan Submitted	due 60 days after 4)	7/21/2006	n/a	7/21/2006*
9)	Financial Assurances Due	60 days after approval of 7)	11/10/2006 (assumed 30 days to approve 7)	12/31/2007	8/11/2008
10)	CMI WP Approved	assumed 60 days after 8). Can approve PDI early (14 days)	9/19/2006 for entire WP. 8/4/2006 for PDI	n/a	9/1/2006 (mine fire), 11/2/2006 (geoprobe), 2/13/2007 (Work Plan except soil sampling), 4/20/2007 (soil), 5/3/2007 (Work Plan except Section 7.5)
11)	PDI Start	assumed 3 weeks after PDI Work Plan approval, weather permitting	8/28/2006	n/a	9/12/2006 (mine fire), 11/27/2006 (geoprobe), 4/23/2007 (soil, lead), 8/6/2007 (soil, PCB PAH)
12)	PDI Complete	assumed 3 weeks after 11)	9/18/2006	n/a	10/16/2006 (mine fire), 11/29/2006 (geoprobe), 5/25/2007 (soil, lead), 8/6/2007 (soil, PCB PAH)
13)	Prelim. Design Submitted	due 90 days after 12)	12/18/2006	n/a	6/29/2007
14)	Prelim. Design Comments	Assumed 45 days after 13)	2/1/2007	n/a	8/10/2007
15)	Revised Cost Estimate	due on 2/15/2007	2/15/2007	n/a	2/15/2007
16)	90% Design Submitted	due 90 days after 14)	5/2/2007	n/a	11/8/2007
17)	Request for Bid Issued	assumed 2 weeks after 16)	5/16/2007	n/a	12/7/2007
18)	90% Design Approved with Comments	Assumed 30 days after 16)	6/1/2007	n/a	12/13/07 (except SAP)
19)	100% Design Complete to Bidders and EPA	due 2 weeks after 18)	6/15/2007	n/a	4/11/2008, Revised 5/12/2008, Revised 6/3/2008
20)	100% Design Approval	assumed 2 weeks after 19)	6/29/2007	4/25/2008	5/9/2008, 6/29/2008, 6/9/2008
20a)	Permit Approvals Complete			4/28/2008	5/9/2008, except Regulated Fill
21)	Final Title Notice Submitted	due 30 days after 20)	7/30/2007	5/25/2008	
22)	Bids Received	due 3 weeks after 20)	7/20/2007	n/a	2/11/2008
23)	Award	assumed 2 weeks after 22)	8/3/2007	n/a	4/2/2008
24)	Notice of Contractor to EPA/DEP	Day after award	8/4/2007	n/a	4/3/2008
25)	Revised Cost Estimate	due on 8/15/2007	8/15/2007	n/a	8/15/2007
26)	Construction Start	assumed 2 weeks after award and approvals, weather permitting	8/20/2007	5/12/2008	5/12/2008
27)	Revised Cost Estimate	due 60 days after 20)	8/28/2007	5/25/2008	5/23/2008, approved 6/12/2008
28)	Revised Cost Estimate	due on 2/15/2008	2/15/2008	5/25/2008	5/23/2008, approved 6/12/2008
29)	Revised Cost Estimate	due on 6/15/2008	6/15/2008	8/15/2008	7/9/2008
30)	Revised Cost Estimate	due on 2/15/2009	2/15/2009	2/15/2009	
31)	Construction Complete	See note above	7/20/2009	11/30/2009	
32)	Revised Cost Estimate	due on 8/15/2009	8/15/2009	8/15/2009	
33)	Submit CMI Report	due 90 days after 31)	10/19/2009	2/28/2010	
34)	CMI Report Approved	assumed 30 days after 33)	11/18/2009	3/30/2010	

**NOTES**

- The dates in bold are committed dates for submissions. Other dates are assumed time frames for activities. The projected dates are thus minimum dates that depend on earlier dates meeting the schedule. The schedule assumes that the Borough permitting process will not extend the time frame for construction start.
- \* indicates that USEPA and PADEP approval of the submitted document has not yet been received.
- Projected dates are from CMI Work Plan Table 11-1 and represent the original schedule for the CMI. The revised projected dates reflect the current schedule based on approvals received to date.
- USEPA and PADEP approved not submitting the February 15, 2008 revised cost estimate until the 100% Design was approved and construction costs were finalized.





## ATTACHMENTS PROVIDED ON CD

Third Quarter 2008 Ambient Air Monitoring Report  
Second Quarter 2008 Stormwater Management Basin Performance Monitoring  
Third Quarter 2008 Lackawanna River Sediment Sampling  
Throop Borough Council Meeting Minutes  
Monitoring Well, Boring and Lysimeter Decommissioning Report  
Groundwater Monitoring Report, June 2008 Event  
Construction Documents  
    Approved Submittals  
    Construction Schedules  
    Daily QA Reports  
    Daily QC Reports  
    Meeting Minutes  
    Monitoring Results  
    Photographs  
    Weekly QC Reports  
    Response to Request for Information  
    Design Addenda  
    Confirmation Sampling