



**MARJOL BATTERY SITE
QUARTERLY PROGRESS REPORT
NO. 17**



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QUARTERLY PROGRESS REPORT
NO. 17**

Prepared For:

**GOULD ELECTRONICS
Eastlake, Ohio**

Prepared By:

**ADVANCED GEOSERVICES
West Chester, Pennsylvania**

**November 15, 2010
Project No. 92-002-230**

CERTIFICATION STATEMENT

I certify that the information contained in or accompanying Quarterly Progress Report No. 17 dated November 15, 2010 for the Marjol Battery Site in Throop, Pennsylvania is true, accurate and complete.

As to those portions of Quarterly Progress Report No. 17 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

NAME:

Thomas N. Rich

TITLE:

Chief Administrative Officer

DATE:

November 15, 2010

**QUARTERLY PROGRESS REPORT NO. 17
MARJOL BATTERY SITE**

DATE: November 15, 2010 92-002-230

REPORTING PERIOD: Third Quarter 2010 (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). This is the final quarterly report for the Marjol Battery Site.

ACTIONS DURING THIRD QUARTER 2010

PERMITTING AND DESIGN

The following activities were accomplished during Third Quarter 2010:

- Responses to Lackawanna County Conservation District (LCCD) comments on NPDES Permit Minor Modification No. 6 were submitted on August 9, 2010. Minor Modification No. 6 proposed to allow the temporary diversion berm north of the sediment basin to remain as a permanent diversion berm and to install a rip rap channel to the sediment basin. LCCD approved Minor Modification No. 6 on August 30, 2010. A copy of the responses to comments and approval are provided on the enclosed CD.
- NPDES Permit Minor Modification No. 7 was submitted on August 10, 2010. Minor Modification No. 7 proposed modifications to the Low Area at the North Woods. Minor Modification No. 7 was approved by PADEP on August 23, 2010. A copy of the submission and approval are provided on the enclosed CD. On September 11, 2010, BCM Engineers, on behalf of Throop Borough, approved Minor Modification No. 7 and inquired regarding maintenance obligations. AGC responded to BCM Engineers on September 14, 2010 that Gould is responsible for maintenance of the Site, including the North Woods Low Area.
- On August 26, 2010, USEPA and PADEP approved the revised cost estimate issued on August 16, 2010. The approval required no additional funding to the trust.



- A Notice of Termination (NOT) for the Throop Borough NPDES permit was submitted to LCCD on September 1, 2010. The NOT requested to remove Gould and SCE from the permit governing the Franko Street Extension and the Borough's 48-acre property. On September 23, 2010, representatives from AGC, Throop Borough, and LCCD met to discuss the NOT. LCCD requested an analysis of the ability of the roadside swales to manage a 10-year storm. AGC provided the analysis on October 13, 2010, and a copy is provided on the enclosed CD. BCM Engineers, on behalf of Throop Borough, concurred with the analysis and provided a letter on October 18, 2010 to that effect. A copy of the letter is provided on the enclosed CD. LCCD concurred with the analysis and will be providing a letter removing SCE and Gould from the permit.
- Following concurrence by USEPA and PADEP on July 23, 2010, a fence permit application was submitted to Throop Borough on September 23, 2010 for the proposed split-rail fencing at the Site. The permit was issued by Throop Borough on September 24, 2010. A copy of the permit is provided on the enclosed CD.
- A meeting was held on August 5, 2010 to review design requirements for post-construction monitoring, maintenance and inspections. USEPA, PADEP, Gould, AGC, SCE, USACE, Gannett Fleming and Cocciardi attended. The meeting minutes are provided on the enclosed CD.

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 2010:

- Carroll Engineering and Dunda Associates were on-site throughout the Third Quarter as needed to continue survey control.
- SCE electricians were on-site throughout the quarter as needed to repair electrical and power issues. Electrical work this quarter included power disconnect and reestablishment during trailer relocation, power line relocation for high volume air samplers and parking light lighting, and power disconnect for demobilization.
- SCE maintained and repaired the rock construction entrance as needed and directed throughout the quarter. An excavator was used to turn over the rock and/or place additional rock. The water trucks were used to wash down the sediment and limit dust for truck and personnel traffic.



- Dewatering of the Sediment Basin through the skimmer and outlet structure was conducted on an as needed basis following the Design procedures, including sampling.
 - Due to a storm event that began on September 30, 2010 and continued into the Fourth Quarter, the storm water in the basin topped both the baffle and the outlet structure resulting in a discharge that exceeded the during construction performance standard for turbidity. Samples of the discharge were collected for total and dissolved lead. Results are provided in the Discharge Monitoring Report on the enclosed CD.
- SCE performed maintenance of the erosion and sediment controls as needed and directed throughout the quarter. Maintenance included, but was not limited to, the following:
 - removal of sediment buildup;
 - repair of silt fences; and,
 - turn over and placement of additional stone at the rock construction entrance.
- Repair of erosion rills and damage was conducted throughout the quarter on an as-needed and directed basis. The rills were filled with additional topsoil and seeded. Depending on the location of the repairs, the areas were also stabilized with jute mat, straw, or erosion control mat (ECM).
- Site-wide stabilization activities resumed and continued throughout the quarter. Topsoil amended with peat and permanent seed were placed at remaining areas outside of the Containment Area (CA) from July 15, 2010 through July 30, 2010. Depending on the location, seeded areas were further stabilized with ECM or straw with a mulch binder. RAM-T was on-site to complete the work using hydroseeding equipment.
- Construction activities at the Franko Street extension were completed on July 6, 2010. A final inspection of the road was conducted with Throop Borough on July 8, 2010. No issues with the construction or condition of the road were reported at the time of inspection.
- Import of fill material from the Church borrow source for future restoration activities and basin conversion continued as needed throughout the quarter until July 29, 2010.
 - Imported topsoil was amended on-site with peat to meet organic content requirements and stockpiled in the area west of Area H. Import continued until a sufficient supply was on-site.



- Structural fill was also imported and stockpiled west of Area H. Import continued until a sufficient supply was on-site.
- Repair of the gabion mattresses site-wide continued throughout the quarter. Repair of the mattresses included removal of the lids, rearrangement of the rock to expose the internal cells, and lace wiring the cell structures and the perimeter of the mattress to the lid. Repairs were reviewed and approved by on-site AGC personnel. All repairs were completed on August 26, 2010.
- Placement of amended topsoil within the CA continued during the Third Quarter. A six-inch lift of material was tracked into place with bulldozers. PVC pipe sections marked with a six-inch line were placed throughout the CA and used to guide depth placement. The depth markers were removed as placement progressed. Topsoil placement within the CA was completed on July 13, 2010.
- Stabilization activities on the CA continued throughout the Third Quarter. RAM-T reported to the Site to assist SCE with stabilization work.
 - Topsoil was prepared for seeding using a weighted chain link fence panel as a drag. Permanent seed mixture, fertilizer and liquid lime were applied using hydroseeding equipment. Curlex ECM was placed over seeded areas and tacked into place by hand using biodegradable and wire staples. Stabilization work at the CA was completed on July 31, 2010.
 - An adjustment to the Post-Construction Erosion & Sediment Control Plan was made to allow 12-inch and 18-inch silt socks in place of 18-inch and 30-inch silt fence at the CA perimeter and benches. RAM-T installed the silt socks as laid out by SCE on July 12 and 13, 2010. Additional 12-inch silt socks were also placed surrounding the stockpile area.
- The construction of the cap bench outfalls continued through July. An excavator was used to excavate the channel subgrade and construct the berms. A bulldozer and smooth drum roller were used to prepare the subgrade for geotextile and stone placement. Construction and installation of the cap bench outfalls was completed by July 17, 2010.
- The installation of the concrete pads surrounding the monitoring wells was completed on July 1, 2010. A wooden form was used to construct the 30-inch by 30-inch by 6-inch pads.
- On July 2, 2010, Drum repaired the southwestern slope of the sediment basin adjacent to the outlet structure that was disturbed during contaminated sediment removal activities. An excavator was used to clean out the void and bench the area for backfilling. Based on review of AGTEK grades, minimal fill was needed in the area to meet design grades. On-site structural fill was used to fill in the



void. The bucket of the excavator and a smooth drum roller were used to compact the material into place. The area was tested for compaction prior to the placement of topsoil and seed.

- Sediment build up in the South Swale was removed and the swale was reshaped using AGTEK equipment to maintain survey control. A bulldozer was used to grade and cut any excess material. Cut material was transported via haul truck to the stockpile area. Once design grades were met, fresh topsoil, permanent seed and permanent ECM were installed. The installation of the ECM included check slots at 30-foot spacing. This work was performed from July 15, 2010 through August 5, 2010.
- SCE relocated the staging area adjacent to the parking lot to the stockpile area east of Area H to prepare for stabilization. All remaining equipment and supplies on-site along with the small storage trailer were transported to the designated stockpile area on July 15 and 16, 2010.
- On July 17, 2010, SCE demolished the AGC support trailer. The demolition work was completed with an excavator and by hand. The remnants of the trailer were placed into a roll off container for off-site disposal as discussed below.
- On July 21, 2010, construction of the permanent access road was completed. The remaining eastern and southeastern sections were installed. Geotextile was placed on the overexcavated area and prepared subgrade with an 18-inch overlap. 2A modified stone was placed on the geotextile and graded using a bulldozer to an eight-inch thickness. The stone was compacted using a smooth drum roller.
 - Based on a request from AGC in order provide enough spacing for the proposed permanent fencing , a portion of the southeastern access road running along former Grove Street was moved toward the South Swale, approximately three feet from the dripline of the pine trees.
- The waterline crossing former Grove Street was inspected on July 26, 2010. SCE opened the line to confirm it was not active. When opened, no water leaked out of the flex pipe and no pressure buildup was present. The pipeline was exposed approximately 18 inches below grade and folded over itself several times. Wire was then used to secure the flex pipe in place. The existing fill material was replaced over the abandoned line, and topsoil and seed were applied.
- On July 26, 2010, SCE placed geogrid netting from the Woodlawn Street gate to the permanent access road as requested by AGC. A 20-foot wide section of grid was centered with Woodlawn Street and tacked into place prior to the placement of topsoil.



- Drum and SCE reestablished the two-foot high permanent diversion berm along the base of the North Woods Slope. Permanent ECM was removed so that a mini-excavator and bulldozer could regrade the area to design elevations. Any standing water that had accumulated in the low areas was drained off via a small trench to the staging area. Once design elevations were reached, topsoil was applied and the area was seeded with permanent seed mixture by hand. Permanent ECM was installed along the swale portion of the berm. Curlex matting was used to stabilize the outside of the berm. Work activities occurred from July 28 through 30, 2010.
- Additional 2A modified stone was imported to the Site on August 4 and 5, 2010, to redress the permanent access road and the parking area. A bulldozer was used to track the material into place and a vibratory smooth drum roller was used to compact the material.
- On August 4 and 5, 2010, Drum installed the rock channel on the north side of the Sediment Basin. The footprint was excavated to the approximate dimensions indicated in NPDES Permit Minor Modification #6 (one foot deep by four feet wide with 3:1 side slopes). Once the channel was excavated, geotextile and R4 stone was installed.
- Monitoring well casings were repaired on August 4, 2010 and surveyed on August 18, 2010.
- Drain Tech was on-site August 16, 2010 to conduct post-construction video documentation of the underground sewer pipe on Delaware Street.
- On August 27, 2010, SCE demobilized the portable toilets, office supplies, and office furniture from the Site.
- Drum demolished the guard trailer structure on August 27, 2010, using an excavator. Debris was then placed in a roll-off for off-site disposal as discussed below. The dumpster with the debris was removed from the site on August 30, 2010.
- On August 27, 2010, Drum installed the rip rap channel at the northern corner of Area B to repair the erosion damage caused by dewatering of the Sediment Basin. An excavator was used to dress the eroded area and geotextile was placed on the subgrade. The fabric was trenched in place at the top of the slope prior to placement of the R-4 stone.
- SCE achieved Substantial Completion by the close of operations on August 27, 2010.
- Drum demobilized all remaining equipment from the Site on September 3, 2010.



- SCE demobilized the support trailer from the Site on September 9, 2010.
- Following Substantial Completion, SCE was onsite as needed and requested to complete erosion repairs, repair perimeter fencing, water grass seed, and apply Pond Clear (flocculant) to the Sediment Basin.
- 42.28 tons of municipal waste was transported to Keystone Sanitary Landfill for disposal during Third Quarter 2010. The material was non-contaminated construction debris and materials from trailer demolition. Weight tickets are provided on the enclosed CD.
- No decon water sampling was conducted during the quarter as there was no decon water generated during the quarter.

Items provided on the web portal including construction schedules, weekly inspection reports, meeting minutes, and as-built drawings are provided on the enclosed CD.

QUALITY ASSURANCE

The following activities were accomplished during Third Quarter 2010:

- AGC personnel continued to monitor construction activities on a daily basis until the completion of construction on August 27, 2010. Daily Field Reports are included in the Daily Quality Assurance reports.
- Daily Erosion and Sediment Control Inspections were continued until the completion of construction on August 27, 2010. Inspections were also conducted after each rain event.
- Weekly Erosion and Sediment Control Inspections of the Throop Borough Borrow Source were continued throughout the quarter.
- Daily perimeter fence inspections were continued on work days until the completion of construction on August 27, 2010.
- Weekly inspections of the North Woods trails occurred during the Third Quarter. Inspections were conducted to identify any signs of trespassing on Gould's property.



- In an effort to minimize and manage turbidity in the Sediment Basin, AGC implemented the following during the Third Quarter:
 - Applications of flocculant were conducted on the following dates:
 - July 19, 2010
 - July 20, 2010
 - July 22, 2010
 - July 25, 2010
 - July 31, 2010
 - August 24, 2010
 - Eight flocculant logs were installed in the North Swale (3), South Swale (2), and Sediment Basin (3) on July 23, 2010.
- On July 7, 2010, four five-point composite samples of on-site in-place topsoil were collected and sent off-site for organic content analysis.
- On July 8, 2010, a Preliminary Inspection was conducted by AGC, SCE, Drum, PADEP, and USACE to review the status of construction activities. During the tour, a punch list was generated. Minutes are provided on the enclosed CD.
- On August 4, 2010, AGC personnel observed and documented the repairs made to the on-site well casings. The inner PVC casing for monitoring wells MSB-3, MSB-4, and MSB-6 were damaged during casing cutting. The steel outer casing of these wells had been cut down using a cutting torch. The excessive heat of this cutting method melted the top of the inner casing for these wells. To repair the casing, an inflatable plug was placed within the casing of each well to prevent shavings of the cut PVC from falling into the well. The PVC casing was then cut below the area of heat damage using a rotary tool, and the top section of the PVC casing (approximately 4 to 6 inches from each well) was removed. The PVC shavings were removed using a shop vacuum before the inflatable plug was deflated and removed. The outer steel casing of monitoring well MSB-1 was extended using a welding torch. This process did not damage the PVC inner casing; however this PVC casing was too deep within the outer steel casing to be accessible during groundwater sampling activities. To raise the inner PVC casing, approximately 2 feet of additional PVC casing was added to the top of the existing PVC casing using a coupler. Monitoring well MSB-8R was not modified post-construction, and therefore required no repair work.
- AGC conducted a Pre-Final Inspection on August 5, 2010. Gould, AGC, SCE, Drum, USEPA, PADEP, USACE, Gannett Fleming, and Cocciardi attended. An updated punch list was generated during the inspection and is provided on the enclosed CD.



- Following the Pre-Final Inspection on August 5, 2010, AGC conducted a Post-Construction coordination meeting at the Community Relations Office. Topics discussed included site security, air and sediment monitoring, site inspections, and reporting. The minutes from the meeting are provided on the enclosed CD.
- The Final Inspection was held on August 31, 2010. AGC, PADEP, Gannett Fleming, SCE and Drum were in attendance. The August 5, 2010 Punch List was reviewed and found to be complete and the date of Substantial Completion was recorded as August 27, 2010. Minutes are provided on the enclosed CD.
- AGC performed video documentation of the post-construction condition of the surface of Delaware Street on September 3, 2010.
- Post-Construction Weekly Erosion and Sediment Control Inspections began the week of August 30, 2010 and continued throughout the remainder of the quarter. Inspections were also performed after rain events. Inspection forms are provided on the enclosed CD.
- Daily gate checks on working days began on September 8, 2010.
- AGC set up a pump in the North Woods Low Area on September 17, 2010 to dewater standing water. The pump was operated using residential power, with permission of the resident.
- The first monthly O&M Inspection was conducted on September 28, 2010. Representatives from AGC, SCE, and PADEP were in attendance. The Inspection Report is provided on the enclosed CD.
- On the night of September 30, 2010, AGC reported to the Site at 2220 as requested by Throop Borough to inspect the basin capacity and answer questions regarding the design of the stormwater system. Concerns were raised due to a rain event that occurred on September 30 through October 1, 2010.
- Construction As-Built drawings were submitted by SCE for review by Advanced GeoServices. Drawings completed to date are provided on the enclosed CD.

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 2010:

- Weekly air monitoring continued at the Site, and the results show that the ambient air lead levels are below the National Ambient Air Quality Standard of 0.15 $\mu\text{g}/\text{m}^3$. The Third Quarter 2010 Ambient Air Monitoring Report is provided on the enclosed CD. While not required by the Sampling and Analysis Plan, weekly air monitoring was continued at the HV-1, HV-2, HV-3, HV-4 and HV-6 from the completion of construction (August 27, 2010) through the end of Third Quarter. Monitoring at HV-7 (Dickson City) ended on September 1, 2010. PADEP continued to periodically split samples with Advanced GeoServices at high volume sample locations #1 and #4 until June 2010. The results from the June 12, 2010 PADEP air sampling are provided on the enclosed CD.
- The monitor and lift at HV-7 were removed by Environmental Restoration Inc. (ERI) on October 4, 2010.
- Real-time aerosol (dust) monitoring and collocated personal air monitors (PAMs) were not conducted this quarter.
- On September 21, 2010, Advanced GeoServices personnel collected Third Quarter 2010 sediment samples as part of the Final (100%) Design Sampling and Analysis Plan. The sampling consisted of one composite sample of the original locations 3, 6, 7, and 8. The sample result (37.0 mg/kg total lead) and field duplicate result (43.7 mg/kg total lead) were less than the calculated 95th upper confidence limit of the mean (52 mg/kg) for historic sample results at the mouth of Sulphur Creek. Surface water discharges from the site occurred this quarter as discussed in the Discharge Monitoring Reports. The Third Quarter 2010 Sediment Sampling Report is provided on the enclosed CD.
- Discharge occurred from the Proposed Sediment Basin during Third Quarter 2010 as discussed in the Discharge Monitoring Reports (DMR) for July, August and September 2010. Off-site discharges that were compliant with NPDES Permit No. PAI023508001 occurred on July 23, 24 and 30; August 2, 3, 4, 5, 6, 12, 13, 14, 16, 17, 18, 19, 23, 24, 26, 27, 30 and 31 and September 13, 14, 15, 16, 17, and 29, 2010. Discharges with turbidity above 250 NTUs occurred periodically from July 19 to August 2, 2010 and on September 30, 2010. Basin discharges were managed in accordance with the approved plans to limit the release of sediment, including the addition of flocculants and controlling the discharge to the extent feasible. A discharge report for the July 19 to August 2, 2010 event was submitted on August 4, 2010. A non-compliant discharge report was not required for the September 30, 2010 discharge as the event occurred post-construction when monitoring was no longer required as per the approved plans. A stormwater discharge report was submitted covering the period from September 30 through



October 16, 2010. Total and dissolved lead analysis of the discharge throughout these events showed that the lead concentrations in the discharge were well below the performance standard. The DMRs, including the non-compliant discharge report, are included in the Third Quarter 2010 Sediment Sampling Report.

- The 2010 Post-Construction Groundwater Sampling event was conducted from July 12 through 14, 2010 at MSB-1, MSB-3, MSB-4, MSB-6 and MSB-8R. 2010 is post-construction Year 1. The Groundwater Monitoring Report, July 2010 Event (First Annual Post-Construction) is provided on the enclosed CD. Results were below the total lead performance standard of 15 µg/L. When compared to baseline data from 2008, construction activities did not cause an increase in total lead concentrations in groundwater.
- Data from the groundwater sampling event was submitted to USEPA and PADEP on September 9, 2010. On September 10, 2010, USEPA and PADEP approved the purge water to be discharged to the ground surface on-site. Purge water was discharged to the ground surface in the vicinity of MSB-8R on September 28, 2010.
- Site weather data was placed on the web portal. Weather data is provided on the enclosed CD. Use of the on-site weather station ceased on July 16, 2010. Weather data after July 16, 2010 was obtained from the Northeast Regional Climate Center (NRCC) for the Wilkes Barre-Scranton Airport in Avoca, Pennsylvania. Precipitation data were also obtained from the U.S. Geological Survey station in Jermyn, Pennsylvania. On September 12, 2010, the weather station was provided to the Throop Borough Streets Commissioner for use by the Borough.
- Precipitation for July, August, and September 2010 was 2.47", 1.82", and 4.05" respectively, in the form of rain, according to Avoca Airport data from the NRCC.

SITE MAINTENANCE

The following activities were accomplished during Third Quarter 2010:

- Daily perimeter fence inspections were conducted by Advanced GeoServices and SCE on working days until the completion of construction on August 27, 2010.
- Securitas Security (f/k/a Burns Security) provided guard services until August 5, 2010. Security procedures implemented after August 5, 2010 are provided in the August 11, 2010 memo on the enclosed CD.
- Residential areas adjacent to the Site and the slope near the main entrance were mowed by SCE periodically throughout the Third Quarter.



COMMUNITY RELATIONS

The following activities were accomplished during Third Quarter 2010:

1. Throughout Third Quarter 2010, Gould's web site, <http://www.marjolcleanup.com>, for the Marjol Battery Site was updated regularly with air monitoring data, photos, the construction schedule, turbidity data, and other site information. A notification was sent to those individuals who signed up for web-site update notices each time the web site was updated.
2. Throop Borough, Cocciardi & Associates (Cocciardi), USEPA, and PADEP were kept informed regarding the status of work activities at the Marjol Site throughout Third Quarter 2010 via e-mail.
3. Throughout the Third Quarter, representatives for Gould and Throop Borough had discussions and exchanged correspondence relating to the Franko Street extension.
4. On July 6 and 10, 2009, flyers were sent to those on the mailing list reminding everyone of the Annual Blood Lead Screening Program.
5. On July 6, 2009, letters were sent to local churches, PTA's, and Day Care facilities regarding the Annual Blood Lead Screening Program.
6. On July 6, 2009 follow-up letters for the Annual Blood Lead Screening Program were sent to the residents who did not respond to the initial June 30, 2009 letter regarding in-home blood lead screening.
7. On July 6, 2009, 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.
8. On July 6, 2010, AGC was contacted by a resident with concerns about a property on Franko Street. The resident's primary concern was snakes at the property.
9. On July 8, 2010, AGC was contacted by a reporter from the Times-Tribune newspaper. AGC provided the reporter with a copy of the most recent newsletter and the link for the Marjol web site. An article on the Site was in the July 10, 2010 issue of the Times-Tribune.
10. On July 8, 2010, AGC and SCE met with representatives of Throop Borough to do a final review of the Franko Street Extension.
11. On July 12, 2010, AGC provided Throop Borough Council with a summary of activities at the Site. AGC also attended Throop Borough's Special Monthly Work Session and Council Meeting that evening. (See notes from the council meeting on the enclosed CD.)



12. As requested by Throop Borough Council, in response to questions raised by a resident at the July 12, 2010 Council Meeting, a letter providing information on recent activities in Areas F, G, and V was provided to Council on July 14, 2010. (Provided on the enclosed CD.)
13. The Annual Blood Lead Screening Program was conducted at the Throop Borough Civic Center on July 14, 2010. Door-to-door blood lead screening was also conducted on July 14, 2010. Participants were also able to go directly to Lab Corp in Throop from July 14th through July 31st, 2010 for the blood lead screening. A total of 46 individuals participated in the annual blood lead screening program this year. With implementation of the Final Remedy at the Site “substantially complete”, Gould will no longer be conducting the Annual Blood Lead Screening Program; 2010 was the final year.
14. On July 15, 2010, AGC met with the Throop Borough Council President to discuss the fencing to be installed at the Marjol Site following construction completion.
15. On July 20, 2010, AGC was contacted by a reporter from the Times-Tribune newspaper. An article on the Site was in the July 21, 2010 issue of the Times-Tribune.
16. AGC contacted Throop Borough and Cocciardi representatives during the period from July 19 to August 2, 2010, to keep them informed of stormwater management activities during that timeframe.
17. On July 26, 2010, AGC provided Throop Borough Council with a summary of activities at the Site. AGC also attended Throop Borough’s Monthly Work Session and Council Meeting that evening. (See notes from the work session and meeting on the enclosed CD.)
18. A resident from Martarano Drive contacted AGC on July 27, 2010, requesting that the water from the North Woods low area be pumped out. AGC pumped the water out.
19. On July 30, 2010, a flyer providing information on post-construction items at the Site was mailed.
20. As requested by Throop Borough Council, in response to questions raised by residents at the July 26, 2010 Council Meeting, a letter responding to questions about activities at the Site was provided to Council on August 2, 2010. (Provided on the enclosed CD.)
21. On August 2, 2010, AGC attended Throop Borough’s Special Monthly Work Session and Council Meeting. (See notes from the council meeting on the enclosed CD.)
22. The “July 19, 2010 Non-Compliance Report” that was submitted to PADEP was also e-mailed to Throop Borough and Cocciardi on August 4, 2010.



23. On August 9, 2010, AGC provided Throop Borough Council with a summary of activities at the Site. AGC also attended Throop Borough's Special Monthly Work Session and Council Meeting that evening. (See notes from the council meeting on the enclosed CD.)
24. On August 10, 2010, a copy of NPDES Permit Minor Modification No. 7 for the Marjol Battery Site which was submitted to Lackawanna County was also e-mailed to Throop Borough.
25. On August 30, 2010, AGC attended Throop Borough's Monthly Work Session and Council Meeting. (See notes from the council meeting on the enclosed CD.)
26. On September 1, 2010, AGC e-mailed USEPA minutes from the August 30, 2010 Throop Borough Council Meeting which referenced a letter sent by USEPA and questions regarding verification of the residential clean-up. In response, on September 1, 2010, USEPA e-mailed Throop Borough information regarding verification of the community clean-up.
27. On September 13, 2010, AGC provided Throop Borough Council with a summary of activities at the Site. AGC also attended Throop Borough's Special Monthly Work Session and Council Meeting that evening. (See notes from the council meeting on the enclosed CD.)
28. Newsletter #97 was mailed out on September 16, 2010. The newsletter included information on Construction Activities Coming to an End, the Annual Blood Lead Screening Program, the North Woods Low Area Modifications, Stormwater Management, Air Monitoring, and a Summary of Post-Construction Monitoring Activities.
29. AGC did not attend the Special Throop Borough Work Session and Council Meeting that was held on September 20, 2010.
30. On September 21, 2010, AGC was contacted by a reporter from the Times-Tribune newspaper. An article on the Site was in the September 22, 2010 issue of the Times-Tribune.
31. On September 23, 2010, representatives from AGC and Throop Borough met regarding dedication of the Franko Street Extension, the Borough's request for Ash Street access to its 48-acre property, and an access agreement for Throop Borough to do infiltration testing on property adjacent to the Franko Street Extension that is owned by Gould.
32. On September 27, 2010, AGC attended Throop Borough's Monthly Work Session and Council Meeting. (See notes from the council meeting on the enclosed CD.)



33. AGC was in communication with Throop Borough representatives regarding stormwater management at the Site during the rain event on September 30, 2010.

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. Construction activities were completed on August 27, 2010.

Based on the Revised Cost Estimate through June 30, 2010, the CMI, including post-construction activities, is approximately 84% complete.

PROBLEMS ENCOUNTERED

No problems were encountered during Third Quarter 2010.

PERSONNEL CHANGES

No personnel changes occurred during Third Quarter 2010.

ACTIONS PLANNED FOR FOURTH QUARTER 2010

While a quarterly report is not required for Fourth Quarter 2010, the following activities are planned:

PERMITTING AND DESIGN

The following activities are planned for Fourth Quarter 2010:

- Submit proof of recorded deed notice for the Regulated Fill General Permit.
- Submit the Final O&M Plan once As-Built Drawings are complete.
- Submit the certification of completion for the stormwater management facilities as per the Throop Borough ordinance and conduct an inspection if requested.
- Receive LCCD's letter removing SCE and Gould from the Throop Borough NPDES permit.
- Conduct the post-construction inspection of Delaware Street with Throop Borough.



CORRECTIVE MEASURES CONSTRUCTION

No activities are planned for Fourth Quarter 2010 as construction was completed on August 27, 2010. Repairs will occur as needed based on the O&M inspections.

QUALITY ASSURANCE

No activities are planned for Fourth Quarter 2010 as construction was completed on August 27, 2010.

MONITORING

The following activities are planned for Fourth Quarter 2010:

- While not required by the Sampling and Analysis Plan, continue the weekly perimeter air monitoring program until one month after fence installation is completed (approximately late November 2010). Perimeter air lead results will be compared to $0.15 \mu\text{g}/\text{m}^3$ lead (effective October 2009).
- Demobilize perimeter air monitoring equipment.
- Perform Fourth Quarter 2010 post-construction river sediment monitoring in accordance with the Sampling and Analysis Plan. This will be the final sediment monitoring event.
- Conduct weekly erosion & sediment (E&S) and monthly O&M inspections. Conduct additional inspections of E&S measures following rain events.
- Submit results for the Fourth Quarter 2010 Ambient Air Monitoring Report in the Certification Report.
- Submit results for the Fourth Quarter 2010 river sediment monitoring in the Certification Report.

SITE MAINTENANCE

- Residential areas adjacent to the Site and the slope near the main entrance will be mowed as needed.



COMMUNITY RELATIONS

The following activities are planned for Fourth Quarter 2010:

- **October through December, 2010** - Continue to regularly update the Marjol web site with air monitoring data, photos, stormwater management information, and other updates.
- **October 1, 2010** - Submit Letter to Throop Borough Council in response to questions raised at the September 27, 2010 Throop Borough Council Meeting.
- **October 11, 2010** - Attend Throop Borough Council's Special Monthly Work Session and Meeting.
- **October 13, 2010** - Submit Letter to Throop Borough Council and a resident in response to a question raised at the October 11, 2010 Throop Borough Council Meeting.
- **October 15, 2010** - Send out a flyer providing post-construction information to the community.
- **October 25, 2010** - Attend Throop Borough Council's Monthly Work Session and Meeting.
- **November 8, 2010** - Attend Throop Borough Council's Special Monthly Work Session and Meeting.
- **November 22, 2010** - Attend Throop Borough Council's Monthly Work Session and Meeting.
- **December 13, 2010** - Attend Throop Borough Council's Special Monthly Work Session and Meeting.
- **December 15, 2010** - Send out Marjol Battery Site Newsletter Number 98 providing an update on post-construction activities.
- **December 27, 2010** - Attend Throop Borough Council's Monthly Work Session and Meeting.
- **Close the Community Relations Office by December 31, 2010.**



ANTICIPATED PROBLEMS

No problems are anticipated during Fourth Quarter 2010.

Barbara L. Forslund, P.E.
Advanced GeoServices Project Coordinator

cc: Lisa Ayers, Advanced GeoServices
James Cronmiller, Gould
Leonard Zelinka, PADEP
Repository (c/o Lisa Ayers)
Rocco DiPietro, Cocciardi

Throop Borough Council
Louis Cimini, Throop Borough Solicitor
Adam Doubleday, Advanced GeoServices
Roger Moose, GF

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 ¹	Permit Expiration	Pre-Construction Notification	Completion Activities	Date Submitted	Date Approved
Individual NPDES Permit (PAI023508001)	At completion of 90% Design	Advanced GeoServices	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
General NPDES Permit (PAG2-0035-09-005) Throop Borough Borrow Area	N/A	BCM / Advanced GeoServices	LCCD	30 days	3/20/2014	LCCD notified on 3/25/09	Notice of Termination submitted 9/1/10	2/09, 3/09	3/23/2009
Wetlands Waiver	At completion of 30% Design	Advanced GeoServices	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	Advanced GeoServices	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	Advanced GeoServices	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 Permit	After approval of other permits	Advanced GeoServices	PADEP	Approx. 60 days	12/24/2013	None required.	Submit proof of recorded deed notice to PADEP.	11/7/2008	11/24/2008 Administratively complete; permit issued 2/25/09
Fence Permit (08-1001)	At completion of 90% Design	Advanced GeoServices	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. Renewal approved 1/7/2010 for expiration 12/31/2010.	Zoning Officer notified 4/21/2008.	Zoning Officer inspection.	12/14/2007; amended 5/21/2008; amended 8/6/2008; 9/23/2010	1/24/2008; 5/27/2008; 8/14/2008; 1/7/2010; 9/24/10
Preliminary Land Development Plan	At completion of 90% Design	Advanced GeoServices	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	Advanced GeoServices	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	Advanced GeoServices	Throop Borough	To be determined	Begin work within 6 months of issue. Expires 12 months from issue. Renewal approved 1/7/2010 for expiration 12/31/2010.	None required.	None required.	n/a	6/24/2008; 1/7/2010
Trailer Occupancy (Special Exemption Use)	After contractor selection	Contractor	Throop Borough	Approx. 60 days	2 years from issue. Renewal approved 1/7/2010 for expiration 12/31/2010.	Notify Zoning Officer prior to use.	None required.	Discussed at preconstruction meeting 4/29/2008	5/1/2008; 1/7/2010
Air Permit Request for Determination - Solidification at Borrow Source	N/A	Contractor	PADEP		No expiration.	None required.	None required.	10/7/2009	10/13/2009

NOTE:

1. Review time began when application is administratively complete.
2. Because of the extensive clearing and grading activities, the Preliminary Land Development Plan was submitted to Throop Borough which required a review by the Planning Commission and Engineer.

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 locator	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 abandonmen	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 procedure	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 observator 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	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	seed 10/20/08	n/a	n/a	n/a
n/a	Costs for terra tubes and Pond Clea	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 air monitoring 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
7	Martarano alternate seed mix	10/20/2008, 3/10/09, revised 4/3/09	12/15/2009	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	verbal 10/30/08	T&M	n/a	n/a
n/a	Change stabilization to mulch only, in lieu of seed and mulch due to winter weather	n/a	12/5/2008	NPDES	verbal	n/a	LCCD	verbal 11/25/08	11	12/9/2008	3/3/2009
7	Revise excavation sequence to reflect work performed in Phase I and remaining work to be performed in Phase II	10/2/2008, 11/11/2008, 3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	pending	n/a	n/a	n/a
7	Revise SAP Tab 2 and 8	3/10/09, revised 4/3/09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7	Change 2:1 slope seed mix as recommended by EPA	3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	4/28/2009	n/a	n/a	n/a
7	Revised permanent access road stone	3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	4/28/2009	12	2/17/2009	3/3/2009
7	Franko Street extension	3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	4/28/2009	pending	pending	pending
7	Grove Street removal and restoration	3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	4/28/2009	n/a	n/a	n/a
n/a	Regulated Fill Permit WMGR096	2/25/2009	PADEP	Regulated Fill	2/12/2009	Soil Sampling Plan	PADEP	2/25/2009	n/a	n/a	n/a
n/a	General NPDES Permit PAG-2-0035-09-005	2/26/2009	3/23/2009	NPDES	3/10/2009	Throop Borrow Fill Removal Project.	PADEP, LCCD	3/23/2009	pending	pending	pending
8	Revised berm and solidified waste grades	6/12/2009	6/17/2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9	Revised final grades	6/18/2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10	Revised solidified waste and final grade:	7/16/2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Storage of ECM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9	12/31/2008	1/13/2009
n/a	Tree removal at Areas T & M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10	12/9/2008	3/3/2009
n/a	Contract revisior	n/a	n/a	n/a	n/a	n/a	n/a	n/a	13	n/a	3/3/2009
n/a	Chip/grind stumps from Borough borrow and haul road	n/a	n/a	n/a	n/a	n/a	n/a	n/a	14	4/20/2009	4/21/2009
n/a	Excavate fill from F & G, place at alternate support zone	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15	4/20/2009	4/21/2009
n/a	Hydraulic hammer to reduce rocks at Borough borrow	n/a	n/a	n/a	n/a	n/a	n/a	n/a	16	5/4/2009	5/5/2009
n/a	Grading, drainage, seeding, and stone improvements for haul road	n/a	n/a	n/a	n/a	n/a	n/a	n/a	17	5/5/2009	5/12/2009
n/a	Stored materials - geosynthetic:	n/a	n/a	n/a	n/a	n/a	n/a	n/a	18	6/3/2009	6/16/2009
n/a	Change permanent seed mix to steep slope mi	n/a	n/a	n/a	n/a	n/a	n/a	n/a	20	8/12/2009	8/21/2009
n/a	Change portions of access road stone from AASHTO#3 to 4A modified	n/a	n/a	n/a	n/a	n/a	n/a	n/a	21	9/10/2009	9/15/2009
n/a	Jute mat in lieu of temporary or permanent ECM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	22	10/30/2009	11/11/2009
n/a	Transport solidified material from Churcl	n/a	n/a	n/a	n/a	n/a	n/a	n/a	19	9/1/2009	9/8/2009
n/a	Screen and import 6" topsoil and cap cover so	n/a	n/a	n/a	n/a	n/a	n/a	n/a	23	11/23/2009	11/30/2009
n/a	Rehandle cap cover soil and topso	n/a	n/a	n/a	n/a	n/a	n/a	n/a	23A	11/23/2009	12/1/2009
n/a	Change Containment Area ECM to Curlex II	n/a	n/a	NPDES	5/7/2010	Minor Modification No. 5	LCCD	5/12/2010	25	5/10/2010	5/12/2010
11	Revised contours for Containment Area final grading and additional cap bench outfalls	5/26/2010	pending	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Change temporary diversion berm north of sediment basin to permanent diversion berm; add rip rap channel	n/a	n/a	NPDES	6/16/2010	Minor Modification No. 6	LCCD	8/30/2010	n/a	n/a	n/a
n/a	Modifications to North Woods Low Area	n/a	n/a	NPDES	8/10/2010	Minor Modification No. 7	LCCD/PAD EP	8/23/2010	n/a	n/a	n/a

**TABLE 3
CORRECTIVE MEASURES IMPLEMENTATION SCHEDULE
THIRD QUARTER 2010**

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



Milestone		Projected Dates from CMI			
		Work Plan	Revised Projected Dates	Actual 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 (recorded)
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, 5/29/2008, 6/9/2008
20a)	Permit Approvals Complete			4/28/2008	2/25/2009
21)	Final Title Notice Submitted	due 30 days after 20)	7/30/2007	11/30/2009	
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 8/15/2008	8/15/2008	8/15/2008	7/9/2008
30)	Revised Cost Estimate	due on 2/15/2009	2/15/2009	2/15/2009	2/15/2009
31)	Construction Complete	See note above	7/20/2009	8/5/2010	8/27/2010
32)	Revised Cost Estimate	due on 8/15/2009	8/15/2009	8/15/2009	8/15/2009
	Revised Cost Estimate	due on 2/15/2010	n/a	2/15/2010	2/12/2010
	Revised Cost Estimate	due on 8/15/2010	n/a	8/16/2010	8/16/2010
33)	Submit CMI Report	due 90 days after 31)	10/19/2009	2/15/2011 ⁵	
34)	CMI Report Approved	assumed 30 days after 33)	11/18/2009	3/15/2010	

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.
- USEPA and PADEP approved submitting the CMI Report after fence construction and post-construction river sediment monitoring were completed.

Table 4
Marjol Battery Site
Excavation Area
Confirmation Sampling Data

Sample ID	Location of Excavation Area	Excavation Completion Date	Is backfill depth less than or greater than 2 feet?	Sample Area (<2 ft backfill - 0.5 acre; >2 ft backfill - 1 acre) ¹	XRF Confirmation Sampling Date	XRF Confirmation Sampling Results (95th UCL, total lead mg/kg)	Excavation Depth	PCB/PAH Sample ID (not required if excavation depth >4ft)	PCB/PAH Sampling Result	EPA Approval of Sampling Results	Date Backfill Approval given to SCE	Backfill & Topsoil Completion Date (within 7 days of approval)	Permanent Seed Completion Date (within 7 days of grading completion)
EXS	Facility	8/12/2008	>2 ft	0.16 Acres	8/13/2008	139	4-20 ft	N/A	N/A	See note 2 below	8/13/2008 ²	completed with North Swale construction	completed with North Swale construction
CNW-3C	North Woods	10/13/2008	<2 ft	0.16 Acres	10/14/2008	174	6"	N/A	N/A	YES	10/14/2008	10/16/2008	10/21/2008
CNW-1	North Woods	10/13/2008	<2 ft	0.39 Acres	10/13/2008	199	6"	N/A	N/A	YES	10/14/2008	10/16/2008	10/21/2008
CNW-2 R-4	North Woods	10/13/2008	<2 ft	0.57 Acres	10/13/2008	192	6"	N/A	N/A	YES	10/14/2008	10/16/2008	10/21/2008
CNW-3A NW-5 NW-6	North Woods	10/16/2008	<2 ft	0.74 Acres	10/16/2008	142	6"	N/A	N/A	YES	10/17/2008	10/23/2008 ³	10/21/2008 ³
CM-1	North Woods	10/20/2008	<2ft	0.24 Acres	10/20/2008	176	6"	N/A	N/A	YES	10/21/2008	10/21/2008	11/8/2008
CNW8-DB	North Woods	10/22/2008	<2ft	0.28 Acres	11/11/2008	176	6"	N/A	N/A	YES	11/12/2008	12/1/2008	12/3/2008
CNW-7D	North Woods	10/22/2008	<2 ft	<0.50 Acres	10/22/2008	143	6"	N/A	N/A	YES	10/23/2008	10/23/2008	11/4/2008 ⁴
EXFW	Facility	10/8/2008	>2ft	<0.74 Acres	10/23/2008	359	10-30'	N/A	N/A	YES	10/24/2008	pending topsoil	pending topsoil
CW-1CB NW-10 NW9	North Woods	10/24/2008	<2 ft	0.874 Acres	10/23/2008	220	6"	N/A	N/A	YES	10/24/2008	10/24/2008	4/15/2009
EXFE	Facility	10/27/2008	>2 ft	<0.74 Acres	10/30/08	102	5-10'	Not required	N/A	YES	10/31/2008	pending topsoil	pending topsoil
CNW-7AC NW-24	North Woods	10/27/2008	varies from -2' to +6'	0.46 Acres	10/31/2008	184	6"	N/A	N/A	YES	10/31/2008	11/3/2008	11/4/2008
CNW-12AD	North Woods	10/30/2008	<2 ft	0.2 Acres	11/1/2008	111	6"	N/A	N/A	YES	11/5/2008	12/1/2008	4/15/2009
CNW-13 NW-14 W-1A	North Woods	10/30/2008	<2 ft	0.85 Acres	11/1/2008	175	6"	N/A	N/A	YES	11/5/2008	12/1/2008	4/15/2009
CW-6CD	North Woods	10/30/2008	<2 ft	0.39 Acres	11/1/2008	109	6"	N/A	N/A	YES	11/5/2008	12/1/2008	4/15/2009
EXGKJ	Facility	10/21/2008	>2 ft	0.42 Acres	11/3/2008	270	20-30'	N/A	N/A	YES	11/3/2008	pending topsoil	pending topsoil
CNW-15 NW-16	North Woods	11/3/2008	<2ft (minus 2-6')	0.96 Acres	11/6/2008	241	6"	N/A	N/A	YES	11/7/2008	12/1/2008	7/14/2009
CNW-19	North Woods	11/6/2008	<2ft	0.48 Acres	11/7/2008	423	6"	N/A	N/A	YES	11/8/2008	12/3/2008	7/14/2009
CW2-NW18D	North Woods	11/5/2008	<2ft	0.92 Acres	11/7/2008	115	6"	N/A	N/A	YES	12/1/2008	12/1/2008	12/3/2008
CNW17-NW18ABC	North Woods	11/3/2008	<2ft	0.92 Acres	11/7/2008	130	6"	N/A	N/A	YES	12/1/2008	12/1/2008	12/3/2008
CW6-W8D	North Woods	11/6/2008	<2ft	0.75 Acres	11/7/2008	104	6"	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CW3	North Woods	11/6/2008	<2ft	0.51 Acres	11/7/2008	128	6"	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CW4-ABC	North Woods	11/6/2008	<2ft	0.23 Acres	11/7/2008	106	6"	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CW12BC-W8B	North Woods	10/30/2008	<2ft	0.36 Acres	10/30/2008	100	6"	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CNW-21	North Woods	11/10/2008	<2ft	0.28 Acres	11/10/2008	231	2-4'	N/A	N/A	YES	11/11/2008	6/29/2009	7/14/2009
CNW-20	North Woods	11/10/2008	<2ft	0.4 Acres	11/10/2008	152	2-4'	N/A	N/A	YES	11/11/2008	6/29/2009	7/14/2009
CNR-2B	North Woods	11/19/2008	>2ft	0.075 Acres	11/19/2008	129	2-3'	N/A	N/A	YES	11/20/2008	6/29/2009	7/14/2009
EXT [†]	Facility	12/4/2008	>2ft	0.14 Acres	12/4/2008	302	4-17'	N/A	N/A	YES	12/4/2008	4/30/2009	4/30/2009
EXU-NE [†]	Facility	12/3/2008	>2ft	0.052 Acres	12/3/2008	200	6-13'	N/A	N/A	YES	12/4/2008	4/30/2009	4/30/2009
EXJM-B [†]	Facility	12/18/2008	<2ft		12/19/2008	130	2-4'	AWC-CA-E-01	All results below Performance Standards	YES	1/22/2009	pending topsoil	pending topsoil
EXJM-A [†]	Facility	12/15/2008	>2ft	0.06 Acres	12/15/2008	186	4'	N/A	N/A	YES	12/15/2008	pending topsoil	pending topsoil
CW-10	North Woods	12/16/2008	<2ft	0.09 Acres	2/25/2009	87	6"	N/A	N/A	YES	3/14/2009	7/10/2009	not complete
CSWNW3	North Woods	12/16/2008	<2ft	0.33 Acres	3/16/2009	132	6"	N/A	N/A	YES	3/18/2009	7/10/2009	7/21/2009
EXJ	Facility	4/6/2009	>2ft	0.92 Acres	4/7/2009	266	2-10'	N/A	N/A	YES	4/16/2009	Topsoil pending	Pending topsoil completion
EXLJ	Facility	4/6/2009	>2ft	0.36 Acres	4/8/2009	241	5-15'	N/A	N/A	YES	4/17/2009	Topsoil pending	Pending topsoil completion
EXEW	Facility	6/8/2009	>2ft	0.36 Acres	6/8/2009	162	5-20'	N/A	N/A	YES	6/8/2009	Topsoil pending	Pending topsoil completion
EXDS	Facility	6/2/2009	>2ft	0.36 Acres	6/2/2009	184	8-10'	N/A	N/A	YES	6/3/2009	7/21/2009	7/24/2009
EXDN	Facility	5/15/2009	>2ft	0.47 Acres	5/21/2009	190	5-10'	N/A	N/A	YES	5/22/2009	7/21/2009	7/24/2009
EXAE	Facility	5/20/2009	>2ft	0.37 Acres	5/20/2009	322	4-20'	N/A	N/A	YES	5/21/2009	7/23/2009	7/24/2009
EXAW	Facility	5/20/2009	>2ft	0.20 Acres	5/20/2009	278	3-8'	N/A	N/A	YES	5/21/2009	7/23/2009	7/24/2009
EXOE	Facility	5/6/2009	>2ft	<.5 Acres	5/18/2009	198	5-30'	N/A	N/A	YES	5/21/2009	Parking Area completed with South Swale construction	Parking Area completed with South Swale construction
EXPS	Facility	5/12/2009	>2ft	0.35 Acres	5/18/2009	150	4-8'	N/A	N/A	YES	5/18/2009	completed with South Swale construction	completed with South Swale construction
EXRQW	Facility	5/12/2009	>2ft	0.40 Acres	5/14/2009	131	4-12'	N/A	N/A	YES	5/15/2009	completed with South Swale construction	completed with South Swale construction
EXPN	Facility	5/12/2009	>2ft	0.35 Acres	5/13/2009	260	4-6'	N/A	N/A	YES	5/14/2009	completed with South Swale construction	completed with South Swale construction
EXQE	Facility	5/12/2009	>2ft	0.33 Acres	5/13/2009	256	4-10'	N/A	N/A	YES	5/14/2009	completed with South Swale construction	completed with South Swale construction
EXONC	Facility	5/6/2009	>2ft	0.44 Acres	5/8/2009	262	4-8'	N/A	N/A	YES	5/9/2009	Pending South Swale/CA Berm completion	Pending South Swale/CA Berm completion
EXONS	Facility	5/6/2009	>2ft	0.77 Acres	5/8/2009	316	5-8'	AWC-CA-S-01	All results below Performance Standards	YES	5/9/2009 (>4' deep) 5/20/09 (<4' deep)	Pending South Swale/CA Berm completion	Pending South Swale/CA Berm completion
EXKE	Facility	4/20/2009	>2ft	0.54 Acres	4/20/2009	244	6-16'	N/A	N/A	YES	4/21/2009	Pending topsoil/CA berm completion	Pending topsoil/CA berm completion
EXKW	Facility	4/20/2009	>2ft	0.52 Acres	4/20/2009	317	6-16'	N/A	N/A	YES	4/21/2009	Pending topsoil	Pending topsoil
EXJW	Facility	4/16/2009	>2ft	0.31 Acres	4/16/2009	395	4-13'	N/A	N/A	YES	4/17/2009	Pending topsoil	Pending topsoil
CSWNW4-5	North Woods	4/15/2009	>2ft	0.92 Acres	4/16/2009	334	6-18"	N/A	N/A	YES	4/17/2009	7/21/2009	7/24/2009
CW5-W7	North Woods	4/9/2009	>2ft	<1.0 Acre	4/13/2009	105	6"-3'	N/A	N/A	YES	4/17/2009	7/23/2009	7/24/2009
CSWNW1-2	North Woods	4/9/2009	>2ft	<1.0 Acre	4/13/2009	482	6"-1'	N/A	N/A	YES	4/17/2009	7/10/2009	7/10/2009
EXIE	Facility	4/4/2009	>2ft	0.31 Acres	4/17/2009	349	3'(intact rock) to 8'	N/A	N/A	YES	4/29/2009	6/29/2009	7/14/2009
EXIW	Facility	4/4/2009	>2ft	0.35 Acres	4/16/2009	249	3'(intact rock) to 8'	N/A	N/A	YES	4/29/2009	6/29/2009	7/14/2009
EXCE	Facility	6/5/2009	>2ft	0.28 Acres	6/8/2009	254	3-4'	AWC-CA-N-01	All results below Performance Standards	YES	6/15/2009	pending topsoil placement (topsoil stockpile area)	pending topsoil placement (topsoil stockpile area)
EXCW	Facility	6/5/2009	>2ft	0.38 Acres	6/8/2009	150	3-4'	AWC-CA-N-01	All results below Performance Standards	YES	6/15/2009	pending topsoil placement (topsoil stockpile area)	pending topsoil placement (topsoil stockpile area)
EXV [†]	Facility	6/19/2009	>2ft	0.22 Acres	6/19/2009	105	4'-10'	N/A	N/A	YES	6/22/2009	pending topsoil	Pending topsoil completion
EXOMU	Facility	6/17/2009	>2ft	<0.50 Acres	6/17/2009	268	4-6'	N/A	N/A	YES	6/17/2009	6/17/2009	RCE/STONE
EXBW	Facility	6/17/2009	>2ft	0.4 Acres	6/17/2009	161	10-15'	N/A	N/A	YES	6/18/2009	pending topsoil	Pending topsoil completion
EXGS	Facility	6/19/2009	>2ft	0.37 Acres	6/22/2009	250	2-4'	N/A	N/A	YES	6/23/2009	pending topsoil	Pending topsoil completion
EXGS2	Facility	6/29/2009	varies between one and six feet	0.37 Acres	6/29/2009	177	2-4'	N/A	N/A	YES	6/30/2009	08/03/09 backfill 9/30/2009 topsoil	Pending topsoil completion
EXDS2	Facility	7/2/2009	>2ft	<0.50 Acres	7/2/2009	230	2-9'	N/A	N/A	YES	7/7/2009	08/03/09 backfill 09/25/09 topsoil	9/25/2009
EXHNE	Facility	9/24/2009	>2ft	0.41 Acres	9/24/2009	256	9'	N/A	N/A	YES	9/25/2009	Awaiting excavation completion	Awaiting excavation completion
EXFHR [†]	Facility	9/21/2009	>2ft	0.04 Acres	9/21/2009	194	2'	N/A	N/A	YES	9/25/2009	Awaiting excavation completion	Awaiting excavation completion
EXTSB	Facility	4/24/2010	>2ft	<0.50 Acres	4/12/2010 to 4/24/2010	267	1-2'	N/A	N/A	YES	N/A	N/A	N/A

N/A = Not Applicable

Notes:

- Excavation start date based on grubbing activities.
- Excavation areas sampled during PDI sampling (North Woods) can have a confirmatory sampling area up to one acre in size as per the SAP
- AGC approval, onsite regulatory representative observed final excavation area. EPA approval for all other excavation areas.
- Areas within excavation area were used for topsoil stockpiling once confirmatory sampling was approved, final topsoil grading and/or seeding was postponed until stockpile was used. Dates may appear to inconsistent but indicate date of entire area being topsoiled or seeded.
- Excavation areas requiring PCB/PAH sampling if excavation is <4 feet
- AWC-CA-E-02 was collected at Area J on April 8, 2009. Results indicated PCB/PAH levels above the performance standard. The excavation was extended below four foot depth and additional PCB/PAH sampling was not required.
- EXFHR was resampled due to cross-contamination during stormwater management control. This area actually located in Area F was resampled during excavation activities in Area H.



ATTACHMENTS PROVIDED ON CD

Third Quarter 2010 Ambient Air Monitoring Report
Third Quarter 2010 Lackawanna River Sediment Sampling
2010 Groundwater Monitoring Report
Throop Borough Council Meeting Minutes
Construction Documents
 Approved Submittals
 Construction Schedules
 Daily QA Reports
 Daily QC Reports
 Progress Meeting Minutes
 Monitoring Results
 Basin Discharge Monitoring
 Perimeter Air Monitoring
 Photographs
 Weather Data
 Permits
 As-Built Drawings
 Disposal
 Site Security Memo
 Construction Completion Inspections and Punchlists
O&M Inspection
Post-Construction Meeting Minutes
North Woods Low Area
Fence Drawings
Letters to Throop Borough