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PART B

SURFACE MINING PERMIT NO. 54733020C35 Lehigh Coal and Navigation Company SPECIAL CONDITIONS OR REQUIREMENTS

The following special conditions or requirements are hereby incorporated into the permit and represent permit conditions.

1. This permit revision is issued to incorporate the provisions of General Permit No. WMGR085 for the processing/beneficial use of residual waste into this Surface Mining Permit, pursuant to Special Condition #2 of that General Permit, which was issued to Lehigh Coal and Navigation Company (LCN) on March 2, 2004. General Permit No. WMGR085 authorizes the beneficial use of a mixture of dredge material, coal ash, cement kiln dust (CKD) and lime kiln dust (LKD) for use as fill in mine reclamation. This permit revision approves the beneficial use of specific mixtures of these residual waste materials in the reclamation of the Springdale Pit. An additional permit revision would be required for the use of this residual waste mixture for the backfilling of other active or abandoned pits within this surface mining permit, and additional information and notifications for "a new placement area" would have to be submitted pursuant to Special Condition #22 of General Permit No. WMGR085.

Previous revisions of this Surface Mining Permit were issued in September/October 2002 and prior to that to incorporate provision of Conventional (full cost) Bonding, the Consent Order and Agreement dated September 25, 2002, approval of coal ash placement, the Consent Order and Agreement of May 17, 1988, and other approvals. These Part B Special Conditions of November 23, 2004; delete previous special conditions that have been fully complied with or are not longer relevant; update and revise previous special conditions relating to previous approvals; and add new special conditions related to the information of General Permit No. WMGR085.

These Part B Special Conditions have been grouped wherein Special Conditions #18 through 25 pertain to mine drainage treatment and related surface water and groundwater monitoring requirements, Special Conditions #26 through 39 pertain to the previous coal ash placement approvals, and Special Conditions #40 through 67 pertain to the beneficial use and processing of the mixture of dredge material, coal ash and CKD/LKD for a backfill material in the Springdale Pit.

The reclamation of all affected areas shall be in accordance with plans and specifications approved by this Surface Mining Permit No. 54733020R2 & R3 CB, Consent Order and Agreement to Beth Energy Mines, Inc. and Lehigh Coal & Navigation Company dated May 17, 1988 and amendments dated June 7, 1990 and January 7, 1994, Consent Order and Agreement between the Department and Lehigh Coal & Navigation Company, Docket No. 02-5-036-S dated September 25, 2002, and in accordance with plans and specifications of the following submissions: December 3, 1993 (Module 10); April 21, 2000, revised September 12, 2002 (proposed modification, Springdale Operation); April 26, 2000 (deficiency responses, Job 99 & Job 111, Modules 9 & 10; August 31, 2000, revised December 23, 2000 (proposed Mine Plan Modification, Little Italy Remine, Modules 9 & 10); Conventional Bonding for Land Reclamation, Little Italy Ash Disposal Facility dated January 3/4, 2002; and Conventional Bonding for Land Reclamation, Springdale Mine, dated March 26, 2002 revised June 11, 2002; unless superceded by conditions outlined below.

2. The mining and reclamation plan (see Modules 9 & 10) and the mine drainage treatment plan for this 7,596 acre permit have changed significantly. The purpose of this condition is to briefly describe the

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scope of those potential changes, options and alternatives, which are more fully set forth in the September 25, 2002 Agreement and Special Conditions #8 through 14 and 18 through 25 below.

During the 1970's and 1980's, Bethlehem Mines Corp. created two huge open pits, Pit #111 (37,000,000 cubic yards) [28,420,000 cubic meters] and Springdale (61,500,000 cubic yards) [47,307,692 cubic meters], and associated huge remote spoil dumps. These open pit mining operations were developed with a large fleet of haulage equipment, and LCN as successor to Bethlehem and inheritor of these open pit reclamation responsibilities, continued these inefficient mining and reclamation practices. Most of the past 10 years has been devoted to revising mining and reclamation plans to handle the spoil one time in a cycle time from its loading point to its final resting place in the backfill. LCN and DEP cooperated in a study to accomplish this goal and a reclamation plan known as the "Menghini Plan" was implemented successfully. Unfortunately, much of the haulage fleet is no longer available and operational on site due to financial constraints; so further modifications of the mining and reclamation plan were necessary to meet conventional bonding requirements. Exhibit B of the September 25, 2002 Agreement shows how the present reclamation liability of \$7,098,130.00 for the Pit #111/Job 99 open pit complex will be reduced within the 5 year permit term to a conventional bond reclamation liability of \$4,550,000.00 by meeting the backfilling schedule of 39,815 cubic yards per month as described in Paragraph 3(a)(4) of the Agreement. At that point when the conventional bond and the reclamation liability are equivalent, at \$4.55 million, LCN may operate a floating pit of that size in continued mining and reclamation development of Job 99, Job 88 and successive phases as described in Special Condition #9 and associated Module 10, or continue with the small scale mining plan described in Paragraph 3(a)(4) and the associated Module 10 alternative mining and backfilling plan to further reduce the conventional bond liability.

The Springdale pit is principally a reclamation operation except for the limited mining operation described in Special Condition #10 and Paragraph 3(b)(3) of the Agreement. Exhibits C and D of the Agreement show 2 alternative schedules for backfilling the Springdale pit to reduce the present reclamation liability from \$6.5 million to \$3 million (Exhibit C) or \$2 million (Exhibit D) within the 5 year permit term. Part of the difference between the original reclamation schedule shown in Exhibit C and the accelerated reclamation schedule shown in Exhibit D is the availability of coal ash and other beneficial use material components (e.g. dredge spoil, cement, kiln dust, and lime kiln dust) described in Sections (1), (6) and (10) of Paragraph 3(b) of the agreement and Special Conditions #26 through 67 below.

The NPDES Permit and associated mine drainage treatment plan of the No. 10 Shaft site is still valid under this permit renewal, and would become operational again if pumping at the No. 10 shaft resumes and mining below the 800' elevation (down to the approved 600' elevation) resumes as described in Paragraph G, Part 3(d) of the Agreement and Special Condition #19 below. However, when the auxiliary treatment plant at the Route 309 discharge site as described in Paragraph P of the Agreement, is replaced with the passive and/or active treatment system required by Paragraph 3(d)(2) and (3) of the Agreement, Special Condition #19 may be determined to be inoperative and deleted. That determination will be made based upon the effectiveness of the new treatment system at the Route 309 discharge location and the schedule to fully fund the Treatment Trust as described in Paragraph 3(d)(3) of the Agreement and Special Condition #25 below.

3. This Surface Mining Permit is issued with bonds determined in accordance with Technical Guidance Document, TGD "Conventional Bonding for Land Reclamation – Coal", ref. no. 563-2504-001.

The Land Reclamation Financial Guarantee (LRFG) annual payment of \$31,500.00 must be received on or before August 28 of each year beginning with 2003. The annual fee will be proportionally reduced as the amount of LRFG is reduced or released in accordance with 86.170-86.172 (retaining to scope;

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procedures for seeking release of bond; and criteria for release of bond). Fee payments are not refundable and will be deposited into the conversion assistance fund.

On or before August 28 of each year beginning with 2003, written notice must be provided to the owners of properties on which Stage 1 & 2 reclamation was completed in the preceding 12 months in accordance with TGD no. 563-2504-001. The permittee shall provide a copy of the notice to the District Mining Office.

On or before August 28 of each year beginning with 2003, permittee shall submit its annual verification of its mining operations in accordance with TGD no. 563-2504-001.

- 4. The permittee shall verify the dimensions of the various components of the authorized operational area and the adequacy of the current bond. This information shall be submitted no later than September 20, 2003 and continue at yearly intervals thereafter until the entire site meets Stage 2 land reclamation standards. This verification shall include, at a minimum:
 - a) An updated Exhibit 9, Operations Map, an aerial photograph, or other descriptive, available documentation, sealed by a Professional Engineer or Professional Land Surveyor showing the mining area, current location and dimensions of the operational area, and areas reclaimed in the past twelve months to "approximate original contour" (AOC), and Stage 1 and Stage 2 standards.
 - b) With regard to the areas reclaimed to Stage 1 and Stage 2 standards mentioned above, the permittee must provide annual written notice to the owners of the properties on which Stage 1 or Stage 2 reclamation was completed in the preceding twelve months. The permittee must provide the Pottsville District Mining Office with a copy of each notice. This notice must inform the landowner of the reclamation and explain that they should contact the Pottsville District Mining Office if they wish the Department to make a formal determination on the adequacy of the reclamation and that they have the right to appeal said determination.
 - c) A comparison of the current conventional bond calculation with one describing the existing liability.

Note, in cases where the operational area dimensions are obviously less than the dimensions used in the current conventional bond calculation and the current Exhibit 9, Operations Map adequately describes the site conditions, the permittee can request exemption from this reporting requirement. This request must be in writing and must be received by the date stated above for annual verification.

- 5. In accordance with Exhibit C of the September 25, 2002 Agreement, LCN would submit a phased deposit of collateral bond in the amount of \$70,961.00 per quarter until July 28, 2006, at which time the conventional bond will be equivalent to the backfilling obligation. LCN subsequently submitted an alternative accelerated reclamation schedule shown in Exhibit D of the Agreement, by which the backfilling obligation and conventional bond would be equivalent at the same point as shown in Exhibit C, but the reclamation obligation would be reduced from about \$3,000,000 to about \$2,000,000 at that point. If LCN fails to comply with the accelerated reclamation schedule shown in Exhibit D for any quarter, LCN shall submit the phased deposit of \$70,961.00 for each quarter that it is delinquent, and that phased deposit payment shall be submitted with the quarterly report due date shown in Paragraph 3(b)(7) of the Consent Order and Agreement, Docket No. 02-5-036-S dated September 25, 2002.
- 6. Surface mining activities under this Surface Mining Permit will occur in abandoned mine lands. A variance from approximate original contour is granted pursuant to 25 PA Code Section 88.116, based upon the cross-sections contained in this Surface Mining Permit and upon documents outlined above in Special Condition #1.

7. This Surface Mining Permit is classified as an open pit mine according to 25 PA Code Section 88.115(c)(2); and the phased mining plans outlined in Special Conditions #8 through 14 serve as the reclamation schedule for the timing of backfilling and grading. The regulatory requirements of 25 PA Code sections 88.44 and 88.115 require that detailed mining and backfilling plans for a time period of at least five years be included with a permit renewal. These plans shall include detailed mining, backfilling and grading plans which specifically state the time periods for coal removal and the completion of backfilling and grading to the permit approved requirements and specifications. They also require that the equipment utilized to mine the site and that are needed to complete the restoration may not be removed from the site until backfilling and leveling have been completed and approved by the Department.

8. Pit 111 Reclamation

Backfilling and reclamation of Pit 111 shall be concurrent with the mining of Job 99. Coal removal shall not limit in any way reclamation activities. As the approved method of mining for this SMP is open pit mining, the following schedule for rough backfilling and grading shall be as follows:

- a) Phase 1 involves backfilling the western half of the Job 111 reclamation area to the elevation of 1000' (305 m), and shall begin north of the #10 shaft, advancing north and west.
- b) Phase 2 involves bringing the area of Phase 1 up to 1200' (366 m) elevation beginning at #10 shaft area, ramping upward to the west and blending into Job 222 reclamation contour of 1200' (366 m) and the Mammoth bottom rock crest contours with slopes no more than 35 degrees. This phase shall be completed by July 31, 2004, and planted/seeded by September 15, 2004, unless otherwise determined by the Department.
- c) Phase 3 involves backfilling of the eastern half of the remaining Job 111 reclamation area to the 1000' MSL elevation (current rim elevation) and shall begin north of the #10 shaft and advance to the east and north. This phase shall be completed by July 31, 2005, unless otherwise determined by the Department.
- d) Phase 4 involves bringing the area of Phase 3 reclamation up to 1200' (366 m). It shall begin at #10 shaft area, ramp upward to the north and east and blend into Phase 2 reclamation contour of 1200' (366 m) elevation and the Mammoth bottom rock crest contours with slopes no more than 35 degrees. This phase shall be completed within four years of completion of mining of Job 99 Mining West End and within two years of completing Phase 3, (i.e. no later than July 31, 2007, unless the contingency plan is implemented), as described in Special Condition #8(e) below.
- e) In the event of non-progressive mining, to be determined by the Department, to guarantee the approved reclamation table of this Job 111, the permittee shall implement a contingency plan contained in the submission of March 26, 2000. The minimum floor elevation of Job 111 shall be at 800' (243.8 m) MSL with north and south walls sloped to a maximum 35° with the north wall slope starting at a minimum elevation of 970' (295.6 m). The implementation of the plan shall start immediately, and shall not exceed two years with planting occurring with the next available planting season. Within two weeks of the "non-progressive mining" determination the permittee shall submit the equipment list to the Department for approval.

9. Job 99 Reclamation: Open Pit Mining

As the approved method of mining for this SMP is open pit mining, the following schedule for rough backfilling and grading shall be followed for Job 99 as outlined in Module 10 dated December 3, 1993, and 25 PA Code Section 88.115C2. Spoil material from Job 99 shall be used continuously and concurrently for backfilling Job 111 and Job 99 progressing west to east, and there shall be no remote spoil dump.

The approved plan and schedule for open pit mining and reclamation of Job 99 contained in items (a) through (e) below, is based upon the current mining plans (Module 10) to a maximum depth of 600' (183 m) MSL. In the event that the permittee determines that mining to a depth greater than 600' (183 m) MSL is feasible, a revised plan and schedule to revise Module 10 along with a conventional bonding application shall be submitted to the Pottsville District Office for approval.

- a) Job 99 Phase I Reclamation of Phase I shall commence sixty days after the final removal of coal from the 600' (183 m) MSL elevation. This will be accomplished using overburden from Phase II mining and development. Phase I shall be backfilled continuously to the 900' (274 m) MSL elevation until completion as outlined on longitudinal cross section y-208 dated revised November 22, 1993 and cross section y-204 and Module 10 Mining Plan.
- b) Job 99 Phase II The reclamation of Phase II shall commence within sixty days after final coal removal from this phase using overburden from Phase II mining and concurrent development in Phase II. Phase II areas must be backfilled to the 1000' MSL elevation as outlined in Module 10 Mining Plan and cross sections y-206, y-207 dated revised November 22, 1993 and longitudinal section y-208 dated revised November 22, 1993 and plan map y-203.
- c) Job 99 Phase III The permittee shall slope the south highwall to 35° into phase II from the 1000' (305 m) to 1050' (320 m) MSL elevation blending into elevations 970' (296 m) to 900' (274 m) in phase I as outlined on cross sections y-206 and y-207 dated revised November 22, 1993 prior to the completion of Job 99 Phase II, but no later than sixty (60) days after the completion of Phase II. This shall be accomplished by dumping and dozing overburden material over the south highwall rim of the pit.
- d) Job 99 Phase IV The permittee shall slope the north wall along the bottomrock to 35° to insure positive drainage 25' to the bottomrock from 900' (274 m) elevation in Phase I and 25' (7.6 m) to the bottomrock from elevation 1050' (320 m) in Phase II.
- e) Job 99 Phase V The permittee shall cover and plant according to planting plan the backfilled areas of Job 99 with substrata type material located on Pile B outlined on Pile B longitudinal section y-225 dated November 16, 1993 or other suitable material sources.
- f) Reclamation of areas adjacent to Job 99 and Job 111 Pile "B" (known as Great Lake Dump) – The permittee shall reclaim Pile B to an elevation of 1155' (352 m) MSL at the west end and 1185' (362 m) MSL at the east end as outlined on plan map Z-198 and cross section y-225 dated November 22, 1993. The first 30" (9.1 m) of substrata material shall be used as final cover for Job 99 and Pit 111. The remaining material below the 1155' (352 m) and 1185' (362 m) elevations may be used as backfill material if additional fill is needed to achieve grade elevations of Job 99 contours.

Pile "D" – This is pre-Act spoil is located south of Job 111 and was identified in the May 17, 1988 Consent Order and Agreement. Permittee may use Pile D, (if affected then the area shall be reclaimed) only after exhausting material contained in Pile B. Pile D (if affected) shall be seeded and planted at the next planting season after removal.

10. Springdale Reclamation

Mining on the Springdale Pit Operation has been completed except for an area located at the western edge of the existing pit. Submission of September 12, 2002 proposes recovery of approximately 160,000 tons of coal. This limited coal mining is incorporated into the reclamation schedule of Springdale Pit, and shall be completed by December 31, 2005, and shall not increase the present acreage of affected area, or increase the conventional bond liability, as described in Paragraph 3(b)(3) of the September 25, 2002 Agreement.

- 11. Backfilling activities on the Springdale Pit Operation shall be conducted on a continuous basis and each piece of equipment shall operate a minimum of 35 hours/week. One (1) dozer (D10 or equivalent), one (1) 7 cubic yard dragline (Manitowoc 4600 or equivalent) one (1) front end loader (Cat 992 or equivalent) and two (2) haul trucks (Euclid R100 or equivalent) are to be utilized for backfilling activities. Additional backfilling equipment is to be incorporated into the backfilling activities in accordance with the time schedule and specifications contained in the proposed modifications Springdale Operation Module 9 & Module 10, April, 2000 submitted to the Pottsville District Office with a letter of April 21, 2000. The operator shall also deposit an amount of spoil/backfill and approved ash material into the open pit area on the Springdale Pit Operation for reclamation purposes equal to and in accordance with the time schedule specified in the Module 10: Backfilling Time Table (rev. 4/00), and depicted in Exhibits C & D of the September 25, 2002 Agreement. Lehigh Coal and Navigation shall submit to the Pottsville District Office a quarterly report identifying the volume of material used for backfilling of the completed mining areas, and the amount of material remaining to be used for the final reclamation until all areas on the Springdale Pit Operation are reclaimed to the approved elevations and permit specifications. This report shall be submitted by January 1, April 1, July 1 and October 1 of each calendar year. The operator shall also submit on January 1 of each calendar year an updated Module 9 map delineating the reclamation work completed during the previous year(s) and areas where reclamation work is still required.
- 12. All backfilling and reclamation activities on the Springdale Pit operation shall be completed to the approved elevations and specifications by October 31, 2012, pursuant to Consent Order and Agreement, Docket No. 02-5-036-S, dated September 25, 2002, and attached Exhibits A through D.
- 13. Little Italy Pit Reclamation and Mining

If the permittee plans to reactivate mining on Little Italy Job to recover approximately 100,000 tons of coal; then the revised Module 10: Operational Plan and conventional bonding application shall be submitted to the Department for approval. The mining and reclamation of this area shall not exceed twenty one months.

14. The permittee shall clearly field mark and maintain, by a professional survey, along and on the north bottomrock and south highwall of Pit 111 and Job 99 the 800' (244 m), 900' (274 m) and 1000' (305 m) elevations. The south bottomrock and north highwall of the Springdale Pit shall also be field marked to the 1075' (328 m) MSL elevation and any higher elevations approved as interim or final grades.

- 15. The permittee is authorized a stream variance for an existing haulroad crossing over Panther Creek.
- 16. The permittee is authorized a road variance for SR 209 for an existing haulroad crossing.
- 17. The permittee is authorized a road variance to conduct mining activity within 100' (30.5 m) of SR 309 provided the following conditions are met:
 - a) That all exiting drainage swales be maintained during the duration of the project.
 - b) That the projected excavation be sequenced so that any surface flow be directed into the inlet for the 30" drainage system.
 - c) That excavation does not occur below the elevation of the highway to an extent as to cause potential hazardous conditions to the traveling public.
 - d) That any final grading of the area upon completion of the proposed removal does not direct any water toward the highway.
- 18. The permittee shall sample the following monitoring points on a monthly basis for the mine drainage parameters. The analysis parameters shall consist of pH, iron, manganese, acidity, alkalinity, sulfate, chloride, and total suspended solids. The sample results can be compiled for the month and submitted to the Pottsville District Office on a quarterly basis.

MP3 – Lausanne Tunnel discharge prior to entry to Lehigh River;
NPDES Point 005 – Route 309 treatment pond effluent;
MP6B – Little Schuylkill River between confluence with Panther Creek and discharge from Route 309 mine drainage treatment system (NPDES Point 005);
MP7 – Little Schuylkill River downstream of zone of mixing of waters at MP6B and NPDES Point 005.

- 19. If the permittee reactivates pumping the mine pool at the No. 10 shaft, they must notify the Department and re-establish monitoring points, MP2-Panther Creek, below discharge from No. 10 shaft treatment plant; MP2A-Panther Creek at confluence with the Little Schuylkill River; MP6A-Little Schuylkill River at confluence with Panther Creek. A plan for dewatering the minepool and its influence on the Route 309 discharge must be addressed. These monitoring points shall be monitored for the same parameters listed in Special Condition #18 above.
- 20. The permittee shall submit, by December 15, 2004, a plan, cross-section and appropriate construction details for the minepool dewatering structure which will convey the mine drainage, presently emanating from the Route 309 discharge point, to the inlet of the sedimentation pond currently being constructed by the DEP Bureau of Abandoned Mine Reclamation (i.e. the BAMR Mt. Pisgah reclamation project). Construction of this dewatering structure shall commence within 15 days of receipt of written notice from the Department. Construction of this dewatering structure shall be completed within 30 days of that written notice, and the mine drainage presently emanating from the Route 309 discharge shall be diverted to the BAMR sedimentation pond within 35 days of the date of that notice.
- 21. The permittee shall submit a plan, by December 15, 2004, for the interim treatment of the Route 309 discharge, using the BAMR sedimentation pond as a settling pond for mine drainage treatment sludge. A major component of this interim treatment plan may be simply moving the existing rank truck, containing liquid sodium hydroxide, to the inlet of the BAMR sedimentation pond.

- 22. Within seven days of the completion of the dewatering structure and mine drainage diversion described in Special Condition #20 above, the permittee shall implement the interim treatment plan described in Special Condition #21 above. The permittee shall minimize the period of time that treatment is interrupted, to a maximum of 2 days without treatment.
- 23. The permittee shall submit a final treatment plan for passive and/or active treatment of the Route 309 discharge by December 30, 2004. The plan must include an engineered design of an inflow and outflow structure as well as the components of a mine drainage treatment system with estimated costs for construction and maintenance.
- 24. The permittee shall construct the final treatment system required in Special Condition #23 by June 30, 2005. If diversion of the discharge from the sedimentation pond is required in order to implement the final treatment system (install berms, curtains, plant vegetation, etc.), the Department may consider such request. Any diversion of the discharge will be considered for a very limited time period.
- 25. By February 1, 2005, the permittee must enter into a Treatment Trust Agreement to establish a trust fund for the perpetual treatment of the Route 309 discharge. If the operator fails to enter into a Treatment Trust Agreement by February 1, 2005, or fails to comply with any term or condition of the signed agreement, the Department may suspend or revoke the authorization to use materials addressed in General Permit No. WMGR085 on this Surface Mine Permit.
- 26. This surface mining permit authorizes the placement/disposal of coal ash as outlined in Special Conditions #27 through 39 at the Little Italy and Springdale pit locations specified in previous revisions to this permit.
- 27. Prior to disposal of fly/bottom ash at this site, the operator must complete the following site preparation work:
 - a) Pump and treat, if necessary, any and all impounded water permit requirements.
 - b) Grade the disposal area to create a stable base.
 - c) Create a sump area to control on-site drainage.
 - d) Install all necessary barrier fill areas within the disposal area.

The Surface Mine Conservation Inspector must review and approve the site preparation work before the commencement of disposal activities.

- 28. Each load of coal ash accepted at this site must have its origin and source verified and approved at the time of placement by the operator or a designated representative. No coal ash load may be deposited at the site if a visual check and oral approval is not documented for it. If the operator and hauler cannot verify the origin as one of the approved sources for that site, or cannot supply documentation of a visual or oral approval at the time of placement, the load of material must be refused and removed from the site to an authorized disposal area.
- 29. Coal ash is not to come into contact with any water. The operator is to keep the coal ash disposal area free of standing, running, or impounded water at all times.

- 30. All coal ash conveyed or hauled to the coal ash disposal site must be within the acceptable moisture content range in order to achieve a minimum compaction of 90% of the maximum dry density as determined by the Modified Proctor Test of 95% of the maximum dry density as determined by the Standard Proctor Test.
- 31. Coal ash is not to be deposited within eight feet (2.4 m) of any coal outcrop, vein or seam, pit floor, high wall or low wall. A minimum eight foot (2.4 m) barrier of suitable materials shall be established between the coal ash disposal area and any coal outcrop, vein or seam, pit floor, high wall or low wall. The barrier material shall be the best well graded material obtainable or available on site, with no material over six inches in diameter, and the best fine grained material available, other than topsoil and subsoil, shall be used for the area beneath the disposal site.
- 32. Should fugitive dust become evident from the coal ash disposal site, and intermediate layer of suitable cover material (six inches or more in depth) or other suitable dust control measures (approved by the Department) shall be applied to those areas associated with the fugitive dust problem.
- 33. Coal ash generated at the following facilities is permitted at this mine site:

UGI Corp. (Hunlock Creek Power Station) Panther Creek Partners Northeastern Power Cogeneration Facility (McAdoo Station) Lovett Generating Station PSEG Fossil L.L.C. Mercer Generating Station Northampton Generating Co., L.P. Dynegy Northeast Generation (Danskhammer Station)

Ash from any other sources needs approval from the Department prior to disposal. Note, In addition to the ash related special conditions specified in this permit correction, all ash from Northampton Generating Co., L.P. must also be placed or utilized in accordance with the conditions contained in General Permit No. WMGR068 (issued on March 20, 2001).

- 34. Complete chemical analysis and leachate analysis of the coal ash shall be conducted on a semiannual basis or upon request by the Department, and submitted to the Department Pottsville District Office within fifteen days of receipt of the test results. All testing shall be conducted on coal ash samples obtained from the disposal site, and each separate coal ash source shall be sampled and tested separately. The required semiannual sampling programs shall be conducted in the following manner:
 - a) A separate sample shall be taken in the first and last six months of each calendar year.
 - b) The sample results from the required semiannual sampling programs shall be submitted to the Department (Pottsville District Office) within fifteen days of receipt of the sample results or analyses, but not later than July 30 for the first semiannual samples, and January 30 of the following year for the second semiannual samples.
 - c) The following shall be submitted annually at the same time as the second semiannual ash sample described above:
 - 1) An annual estimate of the volume of each source of coal ash used on the mine site;
 - 2) An estimate of the volume of remaining site capacity;

3) A topographic map showing the location(s) of all completed, active and future ash placement areas.

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- 35. Modified Proctor or Standard Proctor tests of each separate source of fly/bottom ash to be disposed of within this permit shall be conducted on a semiannual basis, or upon request by the Department, to determine the optimum moisture content and the acceptable moisture range needed to achieve a minimum compaction of 90% of the maximum dry density as determined by the Modified Proctor Test or 95% of the maximum dry density as determined by the Standard Proctor Test. These tests are to be conducted by an independent or certified testing lab for each separate fly/bottom ash source, and the results of these test are to be submitted to the Department (Pottsville District Office) within fifteen days of receipt of the test results.
- 36. If the Department determines that the quality of the fly/bottom ash authorized for disposal by this permit is unacceptable for disposal on site, the permittee, upon notification from the Department shall cease disposal activities immediately, and convey all fly/bottom ash to a proper and permitted solid waste disposal site. The Department may upon review and investigation of the analyses, require the operator to obtain a Solid Waste Disposal Permit, and no fly/bottom ash is to be disposed of on site until such time as the Department reauthorizes disposal activities. The Department may also require the removal of all previously deposited fly/bottom ash from the permit if the previously deposited ash does not meet the acceptable disposal criteria.
- 37. The following monitoring points shall be analyzed on a quarterly basis for the constituents shown on Module 25B Coal Ash Groundwater Quality Parameters – Background and Quarterly Reports; and on an annual basis for constituents shown on Module 25B Coal Ash Groundwater Quality Parameters – Background and Annual Report: Results shall be submitted to the Pottsville District Office within fifteen days of receipt of the test results.

Shaft #3-upgradient monitoring point for ash placement at Little Italy; Lausanne Tunnel-downgradient monitoring point for ash placement at Little Italy; Monitoring Well #1-upgradient monitoring point for ash placement at the Springdale Pit; Shaft #10-downgradient monitoring point for ash placement at the Springdale Pit; NPDES 005 (Rt. 309 discharge)-downgradient monitoring point for ash placement at the Springdale Pit.

- 38. If the Department determines the need for additional monitoring data during mining and reclamation, the permittee shall establish and commence monthly sampling of additional ground and/or surface water monitoring points (i.e. cased wells, streams, etc.) located within or outside the coal ash disposal area. Within thirty days of receipt of the written notice from the Department requiring additional monitoring points, the permittee shall submit a plan for approval, showing the location of any proposed surface water monitoring points and the location and depth of any proposed ground water monitoring points or wells. This plan shall be implemented within thirty days of receipt of the written to the Department on a monthly basis.
- 39. The final cover layer on the coal ash disposal area shall be a minimum of four feet (1.2 m) and the final one foot layer shall not include any rock over six inches in diameter, to the maximum extent possible, or any coal refuse or related material.

- 40. This Surface Mining Permit is hereby corrected to allow the processing and beneficial use of freshwater, brackish and marine dredge material, cement kiln dust (CKD), lime kiln dust (LKD), coal ash and cogeneration ash permitted under PA DEP Bureau of Land Recycling and Waste Management (BLRWM) General Permit No. WMGR085: for use as fill in mine reclamation, as required by Special Condition #2 of General Permit No. WMGR085. All processing and beneficial use of the mixture of freshwater, brackish and marine dredge material, cement kiln dust (CKD), lime kiln dust (LKD), coal ash and cogeneration ash is to be conducted in accordance with special conditions contained in BLRWM General Permit No. WMGR085, unless the requirements of those conditions are set forth in more detail in SMP Special Conditions #41 through 67.
- 41. General Permit No. WMGR085 approves the beneficial use, and processing prior to beneficial use, of "freshwater, brackish, and marine dredge material, cement kiln dust, lime kiln dust, coal ash, and cogeneration ash by screening, mechanical blending and compaction for use as fill in mine reclamation". Three approved mixtures by percent weight are:

Mix	Dredged Material	Ash	CKD	LKD
А	80-90%	10-20%	0%	0%
В	80-90%	5-15%	5-15%	0%
С	80-90%	5-15%	0%	5-15%

For initial start-up of this beneficial use and processing operation (i.e. Phase $I = 2,500 \text{ yd}^3$ maximum), the permittee shall submit the following information at least 21 days prior to the acceptance of the residual waste materials at the site: (a) an identification of the sources of dredge material, coal ash and CKD/LKD to be used, (b) the most recent sample analyses of the dredge material, coal ash and CKD/LKD, with each component of the mixture analyzed for the chemical constituents required pursuant to Special Conditions #4, 5 and 6 of the General Permit, (c) a specification of which of the 3 approved design mixtures will be used for this initial start-up phase, and (d) a certification (made by a Chemist, Professional Engineer or Professional Geologist) that the components of the mixture and the mixture comply with the requirements of Special Conditions #4, 5 and 6 of the General Permit. The Department will review this information within the 21 day period specified in the General Permit Special Condition #6, and will provide a written approval to proceed, if the information meets the requirements of this condition.

- 42. Each new source of dredge material, cement kiln dust, lime kiln dust and coal ash or cogeneration ash must meet the criteria of Special Conditions #4 through 6 of BLRWM General Permit No. WMGR085. The operator shall submit proof of each source meeting those special condition requirements to the Pottsville District Office, the Northeast Regional Office and Central Office at least 21 days prior to accepting any source for utilization on this SMP, and comply with the requirements of Special Condition #48 below.
- 43. A limited amount of pre-processed dredge material may be accepted for direct placement due to the need to enhance the physical properties of the material portside to make the material more suitable for transportation to the site (e.g. reduce the moisture content and stabilize the material with coal ash, Portland cement, hydrogen peroxide). This acceptance of pre-processed material on an infrequent basis is approved providing that: (a) any coal ash source used portside has been approved in Module 25 of this SMP, (b) the pre-processed mixture meets the criteria of one of the 3 approved design mixtures, and (c) the mixture is sampled at the SMP site and meets all of the chemical parameters and requirements of the General Permit Special Conditions #4 and 6, and (d) notify the Pottsville District Office of the proposed placement of any pre-processed dredge material at least 21 days prior to any placement. The permittee

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shall notify the Surface Mine Conservation Inspector when this pre-processed material is received at the site.

- 44. The operator may modify the three General Permit approved dredge material, cement kiln dust, lime kiln dust and coal ash or cogeneration ash final product mix ratios in order to achieve the specified physical requirements in General Permit No. WMGR085 Special Conditions #25 through 29 and the SMP application information, providing that he can demonstrate to the Department that the currently approved mix ratios do not meet the General Permit special condition requirements because of the material's properties and not inadequate compaction efforts or material placement problems. The operator must also demonstrate that the revised and requested mix ratios meet all chemical analysis requirements of General Permit No. WMGR085 Special Conditions #4 to 6. This revision(s) must also be requested for General Permit No. WMGR085, and no new mix ratio material can be placed on-site until such time as both the SMP and GP are revised and said revisions approved by the Department.
- 45. General Permit No. WMGR085 Special Conditions #6, 11, 34 and 35 control the total quantity of processed and unprocessed residual waste that may be stored at the site prior to placement in the Springdale Pit, and limit that total quantity of residual waste materials to that which can be processed and beneficially used within one week, that which conforms to the schedule for Stage 3 testing under Special Condition #6, and that which is no greater than the amount covered by the bond for removal and disposal of any material not conforming to the chemical criteria of General Permit Special Conditions # 4 and 6. The combined effect of all of these requirements would limit the maximum total quantity approved in General Permit No. WMGR085 to 50,000 cubic yards; however, the contents of the application for the General Permit and the application for this SMP revision effectively limit the total quantity to 10,000 cubic yards for routine operations during the 5 year permit term of this SMP.

As the initial start-up phase of operation will involve a much smaller volume of material until the processing equipment has been calibrated, this permit revision provides for this start up phase of 6 months or less, and incrementally increases the approved total quantity of processed and un-processed stockpiled residual waste in four phases. These four phases are related to the schedule for phased deposit of the bond in Special Condition #46 below, and are as follows: Phase I = 2,500 cubic yards maximum, Phase II = 5,000 cubic yards maximum, Phase III = 10,000 cubic yards maximum and Phase IV = 50,000 cubic yards maximum.

46. General Permit No. WMGR085 Special Condition #11 requires that the bond amount for this residual waste processing and beneficial use facility ".....must be sufficient to cover removal of any wastes beneficially used at the mine site prior to obtaining Stage 3 testing result in the event that testing determines the waste to be unsatisfactory under this general permit". In addition, that special condition requires that any adjustments for inflation and any administrative or contingency fees be consistent with the bonding requirements of the surface mining permit. Therefore, the components of this bond amount are: (a) the removal and disposal of residual wastes not meeting Stage 3 testing criteria, (b) the demolition of equipment and structures consistent with the Conventional (full-cost) Bonding guidelines of the mining program, and (c) a contingency for additional material testing, monitoring of surface water or groundwater, or other unforeseen expenses in closure of the site.

Therefore the following material removal bond amounts have been determined for the four phases described in Special Condition #45 above, based upon a cost of \$42.00 per cubic yard for material removed, transportation and disposal at a landfill:

Phase I	-	2,500 cubic yards	=	\$105,000.00
Phase II	-	5,000 cubic yards	=	\$210,000.00

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Phase III	-	10,000 cubic yards	=	\$420,000.00
Phase IV	-	50,000 cubic yards	=	\$2,100,000.00

The demolition bond amount is \$67,869.00, based upon the review of the "Process System Demolition Cost Estimate" table prepared by Global Remediation Technologies, Inc., and included in the application for SMP revision. The contingency bond amount is \$50,000.00.

All of these bond components are subject to the Annual Bond Review (ABR) process conducted on all surface mining permits, which includes bond adjustments for inflation, and changes in the configuration of equipment and structures, or other unforeseen items.

Therefore the total bond amount approved with the issuance of this surface mining permit revision (SMP # 54733020C35) is \$222,869.00 to include the first phase of the phased deposit of bond. The schedule for submitting the additional material removal bond for Phase II or Phase III above is 180 days from the date of issuance of this permit revision, unless the permittee elects and the Department approves, to extend the Phase I limitation of 2,500 cubic yards maximum of stockpiled material. In the event that the residual waste processing facility is not constructed and no dredge materials or CKD/LKD are accepted at the site, the Department will release the Phase I bond amount.

- 47. The Field Analytical Testing Plan (SAP) required by General Permit Special Condition #6 (c)ii(A) was submitted to the Department in June 2004, and was addressed in the July 9, 2004 technical deficiency letter (items in part C). Written approval of the SAP is received from the Department's Bureau of Land Recycling and Waste Management on November 1, 2004. The SAP shall be updated by December 15, 2004 to specify the digestion methods for total metals, in accordance with acceptable methods in the EPA SW-846 manual, and to include the minor revisions 1 and 2 in the November 1 approval memo. The SAP shall also be updated whenever there are significant changes to the sampling and analytical procedures, and submitted to the Pottsville District Mining Office, the Northeast Regional Office and the central office of the Bureau of Land Recycling and Waste Management.
- 48. In reference to the bonding and stockpiling of material that has not had, nor received acceptable Stage III testing, and the requirements or specifications contained in Special Conditions #45 and #46; the permittee, prior to acceptance of any material to be utilized under General Permit No. WMGR085 shall submit the following information:
 - a) The source(s) and amount of dredge material, LKD and/or CKD (in cubic yards and tons) that is to be delivered to the site on a daily basis.
 - b) The amount (in cubic yards and tons) of mixed/blended dredge material that will be stockpiled/produced on a daily basis.
 - c) The manner in which the permittee will monitor and determine if any dredge, LKD and/or CKD can be delivered to the site with reference to the amount of bond (currently posted) posted to cover the removal of any and all material from the site that does not have the required acceptable Stage III testing analysis.

All of this information should be based on the five day turnaround time that is required to complete the Stage III testing analysis required by General Permit No. WMGR085. The five day turnaround time is required for dioxin analysis, and if this timetable increases; the permittee shall immediately notify the Pottsville District Office and shall submit to the Pottsville District Office for approval, the new testing and analysis timetable, and adjust items a, b, and c to reflect the new timetable and increased bonding for

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additional material storage in accordance with Special Condition #46, within seven days of notification of any testing and analysis timetable change. The permittee may not exceed the amount of processed and unprocessed material specified in Special Condition #46 (e.g. Phase I equals 2,500 cubic yards maximum) unless and until the increased bond has been submitted and approved by the Department.

No material to be utilized under General Permit No. WMGR085 can be accepted on this SMP until the Department reviews and approves in writing; all the material required under this special condition, and the amount of material allowed to be brought onto site on a daily basis and stockpiled or stored on site at any time prior to the receipt of acceptable Stage III testing analysis. The Department may issue orders requiring the immediate cessation of the importation of all material covered by General Permit No. WMGR085, and/or the submission of bonding to cover any material or actions that may be necessary to deal with any material that does or may not meet Stage III testing analysis.

- 49. The Preparedness, Prevention and Contingency (PPC) Plan and the Health and Safety Plan (HASP) submitted with this Surface Mine Permit correction have been reviewed, and deemed interim plans. However, the permittee must revise these plans to reflect the actual site equipment, operational areas, etc.; once all of these, and any other associated items are finalized. These revised plans and information are to be submitted to the Department's Northeast Regional Office and approved (in writing) by that office at least 15 days prior to the shipment or acceptance of any new residual waste materials (i.e. dredge sediments, LKD or CKD) to or at the site.
- 50. The Comprehensive Nuisance Control Plan/Environmental Control Plan addressed in item H.4 of the July 9, 2004 technical deficiency letter shall be updated by December 15, 2004, including measures to control or prevent air quality related nuisances (e.g. dust from coal ash handling) and no new residual waste materials (i.e. dredge sediments, CKD or LKD) shall be transported to the site until written approval is received from the Department's Pottsville District Office.
- 51. The detailed engineering drawings of the proposed transfer, storage and processing areas, containment and processing equipment plans/drawings required by General Permit No. WMGR085 Special Condition #10 were submitted, in part, to the Department, and deemed acceptable. The permittee shall submit final detailed engineering drawings and a certification of facility construction pursuant to the requirements of General Permit No. WMGR085 Special Condition #10, sealed by a Professional Engineer, for approval by the Pottsville District Mining Office within 30 days of completion of the construction of the storage and processing facilities and structures, and at least 15 days prior to the acceptance of any material authorized or covered under General Permit No. WMGR085. The final engineering drawings and certification must note, and clearly delineate, any changes in respect to the plans submitted with this revision. These drawings must also be accepted and approved of in writing by the Pottsville District Mining Office prior to the acceptance of any material authorized by General Permit No. WMGR085. Also, the permittee must contact the Pottsville District Office at each and every major construction phase, to include, but not be limited to (a) leachate and runoff collection system; (b) process equipment construction; and (c) storage area and work area construction/compaction activities.
- 52. All dredge material to be processed under this SMP shall be transported to the Seek Rail area via rail, unless and until a new haulroad from Route 309 is completed and approved by the Department. No dredge material shall be transported to the site by trucks routed through the Route 209/Route 309 intersection in Tamaqua. For small dredge material contracts less than 100,000 cubic yards, trucks that do not travel through the center of Tamaqua Borough may be utilized to transport the dredge material to the Springdale Pit. These requirements may be modified if the operator conducts and submits a traffic

study to the Department addressing the proposed impact of trucks passing through the center of Tamaqua Borough.

- 53. All dredge material, cement kiln dust (CKD), lime kiln dust (LKD), and coal ash or cogeneration ash that is transported to the site via trucks, and all material transported from the Seek Rail area for utilization at the Springdale Pit shall utilize the No. 11 Route 209 access area for ingress and egress.
- 54. All trucks utilized for transporting residual waste materials for beneficial use on this site shall have "fitted tarps" (tarps which cover the entire truck body opening and part of the truck sides) or be adequately covered to prevent waste or waste residue from being dispersed during transport. These fitted tarps or other cover systems shall be in place on all trucks when entering and exiting the site to prevent waste or waste residue from spillage and dusting during transport.
- 55. The operator shall maintain and utilize truck washes and wheel washes at the Seek Rail area and both sides of the No. 11 Route 209 crossing at all times, for all vehicles entering and exiting the site.
- 56. No dredge material, cement kiln dust (CKD), lime kiln dust (LKD), coal ash or cogeneration ash may be stockpiled at the Seek Rail area unless an equipment breakdown occurs, which requires the stockpiling. This stockpiling must be approved by the Pottsville District Office and can only occur for a maximum time span of 24 hours. All spillage and other residual materials that have inadvertently been deposited at the Seek Rail area are to be cleaned up and transported to the Springdale Processing Plant at the end of each day or work shift.
- 57. Dredge material, coal ash, CKD/LKD, and mine spoil (active and abandoned) may all be placed in the Springdale Pit concurrently, pursuant to the conditions of this permit and the Consent Order and Agreement of September 25, 2002. All of the dredge material, CKD/LKD must be mixed with coal ash and processed through the pug mill, unless it is pre-processed material authorized by Special Condition #43 above. The total volume of unprocessed stockpiles of dredge material, CKD/LKD and LKD, plus the processed stockpile of the approved mixture of dredge material, coal ash and CKD/LKD cannot exceed the volume bonded pursuant to Special Conditions #45 and 46 above.

Coal ash may continue to be placed directly into the Springdale Pit, in accordance with Special Conditions #26 through 39 above, without being mixed with dredge material and CKD/LKD in the pug mill. However, these coal ash placement activities shall occur in separate areas or cells (i.e. not intermixed with the dredge/coal ash/CKD/LKD mixture), in which the permittee must demonstrate that the coal ash meets the optimum moisture content, density, compaction and other physical properties specified in Special Conditions #30 and 35 above. The amount of active mine spoil/overburden material that must be used to backfill the Springdale Pit, concurrent with this coal ash placement is specified in Module 10.4 of this permit and Exhibits C and D of the September 25, 2002 Consent Order and Agreement.

58. General Permit No. WMGR085 Special Condition #29 requires the processed mixture of dredge material, coal ash and CKD/LKD be placed and compacted in layers of no more than 2 feet thick to achieve a minimum unconfined compressive strength of 40 pounds per square inch (psi) and a maximum permeability of 10⁻⁵ cm/sec. Additional requirements of specific physical properties of the residual waste mixture, including optimum moisture content and Proctor density tests, are contained in Special Conditions #27 and 28 of the General Permit. The terms "layers" and "lifts" have been used somewhat interchangeably in the contents of the permit applications for the General Permit and this SMP revision, and the purpose of this special conditions is to clarify how compliance with General Permit Special Condition #29 shall be achieved, as illustrated on the typical cross-section drawing Y425 included in the SMP revision. Drawing Y425 shows a sequence of 10 foot layers, each composed of an 8 foot layer of

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the dredge/coal ash/CKD/LKD mixture, overlain by a 2 foot layer of mine spoil. The 8 foot layer of the dredge/coal ash/CKD/LKD mixture is composed of four lifts, each being 2 feet thick and compacted. Therefore the elements of that drawing labeled "2' LIFT-DREDGE-PLACED & COMPACTED" is equivalent to the 2 foot layers in General Permit Special Condition #29, which must be adequately compacted to meet the 40 psi unconfined compressive strength and other physical properties specified in the General Permit.

- 59. The permittee is to conduct on-site geotechnical testing of the compacted fill at a minimum of five locations per day at points designated and recorded according to the "grid system" layout defined in the approved plan. These tests shall be for the purpose of determining the in-place unconfined compressive strength and/or bearing capacity of the material by the "cone penetrometer" or "plate loading" tests. These results are to be compared to previously performed laboratory tests which determine theoretical compressive strengths, and permittee is to demonstrate the correlation through which field compaction requirements are met. For example, it is the permittee's responsibility to demonstrate that field strength values (i.e. in lbs/square inch) of a certain magnitude ensure that the material is compacted properly as mentioned in Special Conditions #28 and 29 of the General Permit. Within one year of the issuance of this permit, permittee must submit a "geotechnical report" which shows the above mentioned correlations to the satisfaction of the Department.
- 60. General Permit No. WMGR085 Special Conditions #31 and 6(c)ii(l) require the permittee to develop and utilize a grid system to identify the location of each day's placement of the residual waste mixture at the mine site. The permittee shall utilize the Global Positioning Satellite (GPS) system plan described in the application for this SMP revision to "locate a minimum of five locations per day, for each day of placement" correlated "to the location of the field permeability and compaction tests, as specified in the Sampling and Analytical Plan". The maximum grid spacing the this system shall be 125 feet x 125 feet in X & Y horizontal coordinates; with the dimensions of the vertical (thickness) z coordinates determined by the thickness of the daily placement. The results of this residual waste placement tracking system shall be graphically documented, made available to the Department upon request, and maintained on-site through final reclamation of the site.
- 61. Drawing Y400 is part of the Exhibit 9 Operations Map of the SMP revision, showing existing contours of the Springdale Pit and adjacent areas as of October 17, 2003, and delineating 7 areas of active (post 1971) mine spoil and pre-Act (pre 1971) abandoned mine spoil. The total volume of mine spoil within these 7 areas is 12.33 million cubic yards, of which approximately 4.8 million cubic yards is active mine spoil as shown in Table 1. The active mine spoil in Areas 1 and 2 shown on drawing Y400 shall be used as a backfill material pursuant to the thickness and volumes shown on Drawing Y425 and Table 1 of the SMP revision and Exhibits C and D of the September 25, 2002 Consent Order and Agreement, prior to utilizing the pre-Act spoil in Areas 3 through 7, unless, a bond adjustment or other guarantee, is made during the annual bond review (ABR) or permit renewal concerning the reclamation of the active spoil Areas 1 and 2.
- 62. Table 1 of the SMP revision shows the cumulative totals of the volumes of mine spoil (burden) and the mixture of dredge/coal ash/CKD/LKD residual wastes beneficially used as fill material to achieve the 1075 foot elevation approved final grade, and successive 10 foot layers from the 1090 foot elevation to the 1200 foot elevation. An annual progress report shall be submitted as part of the Annual Bond Review (ABR) each year documenting the volumes of mine spoil, dredge material, coal ash and CKD/LKD deposited in the Springdale pit and the approximate elevation (i.e. GPS determined) that has been achieved. The 2007 permit renewal and each successive five year renewal of this SMP shall contain a revised Module 18 reclamation map, showing the intermediate or final reclamation grades that would be achieved if the placement of the residual waste mixture would cease within that period of time.

63. The following monitoring points shall be analyzed and submitted on a quarterly basis for the constituents outlined in the approved Sample Analysis Plan in General Permit WMGR085 for the dredge parameters. Lausanne Tunnel – downgradient monitoring point for Springdale Pit; Monitoring Well #1-upgradient monitoring point for dredge mixture placement at the Springdale Pit; Shaft #10-downgradient monitoring point for dredge mixture placement at the Springdale Pit; NPDES 005 (Rt. 309 discharge)-downgradient monitoring point for dredge mixture placement at the Springdale Pit.

General Permit No. WMGR085 authorizes the beneficial use and processing of freshwater, brackish and marine dredge material (see General Permit Special Condition #1), but does not place any site-specific limitations on the relative amounts of these 3 types (depositional environments) of dredge sediments that may be beneficially used. The annual progress report required in Special Condition #62 above shall contain an accounting of how many cubic yards of marine dredge material was beneficially used, as compared to the amount of freshwater or brackish dredge sediments. The chloride data from the groundwater monitoring points listed in this special condition shall be plotted annually and compared to the sulfate data for the points, and to the chloride content of the solid dredge material and TCLP leachate analyses required by General Permit Special Conditions #4 and 6. In the event that the groundwater monitoring data shows a statistically significant correlation between an increase in chloride concentrations and the amount of marine dredge material placed in the Springdale Pit; additional limitations may be placed upon the amount of marine dredge material that may be beneficially used in reclamation of the pit.

- 64. This permit revision authorizes the final grade of the Springdale Pit to be between 1075 feet MSL and 1200 feet MSL (approximate original contour). These revised final grades are being approved as part of this revision to allow the utilization of coal ash, mine spoil and the dredge mixture approved in General Permit No. WMGR085 as mine fill material. The Consent Order and Agreement (Docket No. 02-5-036-S dated 9/25/02) requires LCN to place at least 10 million cubic yards of spoil into the Springdale Pit, and the operator is also hereby authorized to place a maximum of 486,000 cubic yards of coal ash annually into the Springdale Pit for reclamation. The amount (yardages) of dredge material to be placed into the Springdale Pit (along with spoil) is outlined in Table 1. These amounts are to be coordinated and tabulated on a biannual basis to insure the yearly minimum required spoil yardage is placed in the Springdale Pit, and that information (including any CO&A required amount of spoil to be placed or coal ash that can be placed in the pit area) is to be submitted to the Pottsville District Office semiannual and no later than July 30 (for the 1st half of the year) and January 30 (for the 2nd half of the preceding year).
- 65. If the placement of coal ash and/or any material(s) authorized under General Permit No. WMGR085 is planned and/or occurs at an elevation above 1100 feet MSL, the permittee shall conduct background monitoring (for at least 6 months prior to any placement of material above 1100' MSL), and all other monitoring required by Special Conditions #37 and #63 of this SMP revision at the Springdale Pit southern borehole. This monitoring shall be conducted in accordance with the time sampling and constituent requirements specified in Special Conditions #37 and 63, and shall only be ceased upon written approval from the Pottsville District Mining Office.
- 66. All dredge material activities including importation of material(s) processing and/or blending of materials (i.e. dredge, CKD/LKD, coal ash) and the stockpiling and placement of material(s) associated with any work conducted pursuant to General Permit No. WMGR085 shall be supervised, overseen and authorized by the permittee and its approved contractor Global Remediation Technologies, Inc. (GRT) pursuant to the plans, specifications and staff (e.g. GRT QC Engineer) described in the Facility Operations Plan prepared by GRT as the permittee's Operating Contractor. The GRT Site Manager and Field QC Engineer shall be a person who is familiar with, and has experience in, the handling, stockpiling,

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processing and placement of material to be utilized pursuant to General Permit No. WMGR085. While other approved contractors may be involved in the unloading and hauling of dredge material, CKD/LKD and coal ash to the Springdale Pit, no contractor or subcontractor other than GRT shall be involved in the processing and placement of dredge, CKD/LKD, coal ash mixture, unless approved in writing by the Department. The three key persons who will have the responsibility for managing and conducting the activities at the Springdale pit specified in General Permit No. WMGR085, the Facility Operations Plan prepared by GRT, and the special conditions of this permit are: the LCN Operations Manager, the GRT Site Manager and the GRT Field QC Engineer. These three persons shall be responsible for: the management and/or supervision of any approved subcontractors; the resolution of any operational problems; interactions with the Surface Mine Conservation Inspector and any other Department staff involved in activities in or related to the Springdale pit; and correcting any violations cited by the Department concerning the Springdale pit. The permittee shall submit the names and qualific ations of these three persons to the Pottsville District Office, and these key persons shall be approved, in writing by the Department, prior to any activities being conducted under the General Permit No. WMGR085.

67. If a pattern of violation (i.e. 25 PA Code Section 86.213 and 30CFR Part 722.16) develops pertaining to water or air pollution, adverse public health affects or public nuisances related to, or resulting from, the handling, processing, and placement of the materials addressed in GP WMGR085, including but not limited to violations of Special Conditions #40 through 66, the Department may suspend or revoke the authorization to use materials addressed in GP WMGR085 on the Surface Mining Permit.

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