

NPDES Permit No. IL0080061  
Notice No. drgIL0080061

Public Notice Beginning Date: **November 6, 2014**

Public Notice Ending Date: **December 8, 2014**

National Pollutant Discharge Elimination System (NPDES)  
Permit Program

Draft New NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA  
Bureau of Water  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-3362

Name and Address of Discharger:

Buzzi Unicem  
  
2524 South Sprigg Street  
Cape Girardeau, MO 63703

Name and Address of Facility:

Lone Star Industries, Inc. d/b/a Buzzi Unicem  
USA - Tamms Quarry  
New Prison Road  
Village of Tamms, IL 62988  
(Alexander County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commenters shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commenters may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

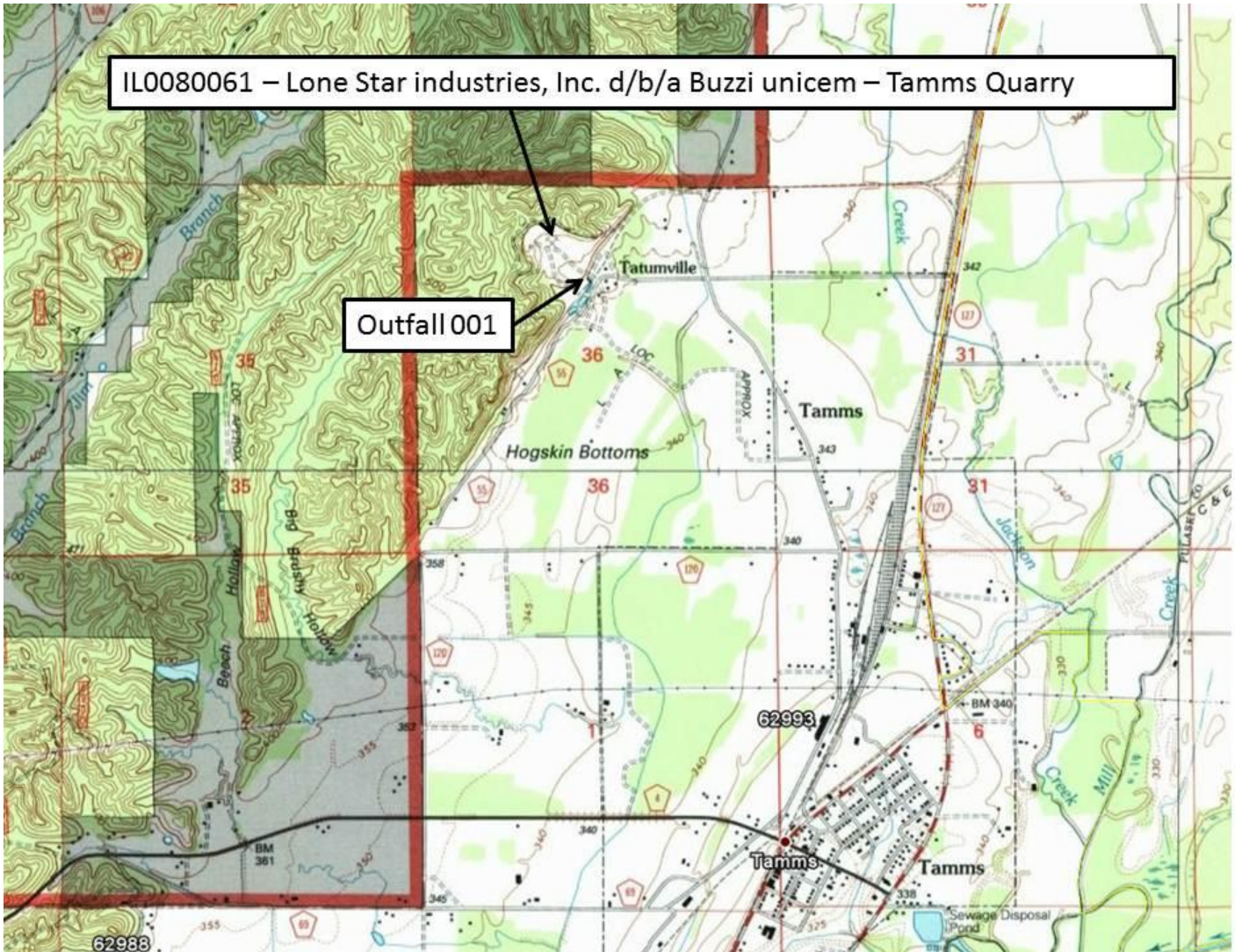
If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Darren Gove at 217/782-0610.

The applicant is engaged in surface mining of industrial sand (SIC 1446). Wastewater is generated from groundwater seepage and stormwater runoff. Plant operation results in an average discharge of 0.1 MGD of groundwater seepage and stormwater runoff from outfall 001 to an unnamed tributary of Sandy Creek.

Application is made for one (1) new discharges which is located in Alexander County, Illinois. The following information identifies the discharge point, receiving stream and stream classification:

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Unnamed tributary of Sandy Creek	37°14'25"	North	89°15'53"	West	Not Rated	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.



The stream segment(s) receiving the discharge from outfall(s) 001 is not on the 303(d) list of impaired waters.

The mine discharge from the facility shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/l		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Outfall(s): 001 – Groundwater and Storm Water Runoff						
Total Suspended Solids				25	45	40 CFR Part 436
Iron (Total)					3.5	406.106(b)
pH	Shall be in the Range of 6.5-9 Standard Units					302.204
Flow(MGD)						
Offensive Conditions	No effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids, color, or odor. Turbidity shall be below obviously visible levels.					406.107

**Antidegradation Assessment  
Buzzi Unicem – Tamms Quarry  
NPDES Permit No. IL0080061 Alexander County**

This is an existing sandstone quarry that occupies a total of 80 acres, approximately 25 acres already having been mined. The new owner seeks an NPDES permit for the stormwater discharge. The previous owner had no NPDES permit. The average discharge will be 0.1 MGD. The site will produce sand to be used at a cement manufacturer in Missouri. The site contains a sedimentation pond that discharged when the previous mine was operational. No other effluents will be discharged other than stormwater.

**Identification and Characterization of the Affected Water Body.**

The receiving water is a small headwater stream draining to an unnamed tributary of Sandy Creek (no segment code). The unnamed tributary is not listed as an impaired water in the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List. The Illinois EPA has not assessed this water body. The unnamed tributary is not given an integrity rating in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System* at this location. The unnamed tributary is not an enhanced water body pursuant to the dissolved oxygen water quality standard. Sandy Creek (segment IXD-01) is listed as impaired for aquatic life use in the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List. The causes of impairment are given as dissolved oxygen and pH. The unnamed tributary of Sandy Creek at the point of discharge has a watershed area of 0.45 square miles according to the USGS StreamStats website. The headwater stream and unnamed tributary flow approximately 3.5 mile before joining Sandy Creek.

Given the very small watershed size of the receiving stream, the applicant was not required to perform a receiving stream characterization. Illinois EPA is already aware of the biological and chemical nature of very small headwater tributaries.

### **Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.**

The quarry discharge will consist of collected and settled stormwater runoff. Total suspended solids in the discharged effluent would not be expected to be increased from the loading in runoff to the receiving stream from the current land use given the treatment provided by the sedimentation pond. Since the sedimentation pond currently exists, water quality monitoring was performed on a sample from the pond. While the sedimentation pond is in need of dredging and the dredged pond should provide better treatment of suspended solids, results for zinc, manganese and lead showed compliance with water quality standards. Total iron, while not covered by a water quality standard, was high and treatment may be required to meet the total iron effluent standard. Water quality standards will be met in the final effluent from the sedimentation pond; no adverse impact on the receiving stream is anticipated.

### **Fate and Effect of Parameters Proposed for Increased Loading.**

The quality of water discharged from the sedimentation pond is anticipated to be of the same or similar quality as the water currently running off the site. Total suspended solids will partition to the stream bed much as they previously did. No adverse impacts to the stream bed or water quality are anticipated.

### **Purpose and Anticipated Benefits of the Proposed Activity.**

The proposed quarry will provide silica sand for industrial use. The sand quarry will provide jobs for local residents and will be a positive factor for the local economy.

### **Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.**

Settling basins to treat stormwater runoff is standard operating practice at quarries. Practical alternatives to this method of treatment do not exist. The quarry will use some of the stormwater that enters the sedimentation pond for internal operations.

Non-discharging systems are impractical given the limited evaporation that occurs in Illinois. Collecting and holding all water for irrigation is not feasible given that crops do not need irrigation immediately after rainfall events. Storage of the water until it is needed for irrigation would require very large holding lagoons.

A sewage treatment facility exists at the Village of Tamms, but this facility does not have the capacity to accept the relatively clean effluent discharge from the sedimentation pond.

The quarry company investigated the use of alternative treatment technologies including membrane treatment such as reverse osmosis. These treatment methods create high salt waste streams that would have to be disposed of elsewhere. These processes are not intended for relatively clean stormwater that may be safely discharged to surface streams. Likewise, biological treatment and chemical precipitation were rejected as ill-suited to this type of wastewater.

### **Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities**

An Eco-CAT endangered species consultation submitted on November 20, 2013 to the Illinois Department of Natural Resources resulted in the identification of several terrestrial threatened or endangered species residing in the area of the quarry. IDNR replied with a letter dated December 10, 2013 indicating that adverse impacts to endangered species were unlikely and terminated consultation.

**Agency Conclusion.**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large through the creation of jobs. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

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NPDES Permit No. IL0080061

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

New (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Facility Name and Address:

Buzzi Unicem  
2524 South Sprigg Street  
Cape Girardeau, MO 63703

Lone Star Industries, Inc. d/b/a Buzzi Unicem USA - Tamms Quarry  
New Prison Road  
Village of Tamms, IL 62988  
(Alexander County)

Discharge Number and Name:

Receiving Waters:

Mine Outfalls

001 – Stormwater Runoff and Groundwater Seepage

Unnamed tributary of Sandy Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

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Permit Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent from the following discharge(s) shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM		
Outfall(s): 001 – Alkaline Mine Drainage, Surface Stormwater Runoff and Process Water							
Total Suspended Solids				25	45	**	***
Iron (Total)					3.5	**	***
pH	Shall be in the Range of 6.5-9 Standard Units. The monthly minimum and maximum shall be reported on the DMR.					**	***
Flow (MGD)						*	Grab
Offensive Conditions	No effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids, color, or odor. Turbidity shall be below obviously visible levels.					3 Per Month	Visual Inspection

\* Effluent sampling for flow shall be continuous if hardware allows otherwise it shall be a single reading when monitoring each parameter. Flows shall be reported as a monthly average on the Discharge Monitoring Reports (DMR).

\*\* Samples shall be taken three times a month as separate grab samples or one time a month as a composite sample. A “no flow” situation is not considered to be a sample of the discharge.

\*\*\* Composite samples shall consist of at least 3 sample aliquots of approximately equal volume of at least 100 milliliters each, collected at periodic intervals within a 24-hour period. If the permittee elects to take and analyze grab samples, in lieu of a composite sample then: 1) if the discharge is expected to occur on only a single day, three grab samples may be taken within a single 24-hour period or, 2) if the discharge is expected to occur on more than one day three separate grab samples shall be taken over more than one day to represent the monthly discharge. The one composite sample or three grab samples shall be representative of the discharge over the calendar month. The analysis results of each composite and grab sample shall be reported on the Discharge Monitoring Reports. The monthly average shall be reported on the Discharge Monitoring Reports.

Discharge sampling and monitoring must be representative of the discharges from the facility considering factors such as frequency, duration and intensity of precipitation runoff and operational practices that affect discharge quality.

Special Conditions

**SPECIAL CONDITION 1. Permit Coverage:** For the purpose of this permit, the covered discharges through the mine outfalls are limited to mine dewatering discharges and pit overflow discharges associated with stormwater runoff.

**SPECIAL CONDITION 2.** No discharge from any mine related facility area under this permit shall, alone or in combination with other sources, cause a violation of any applicable water quality standard as set out in the Illinois Pollution Control Board Rules and Regulations, Subtitle C: Water Pollution.

**SPECIAL CONDITION 3.** The permit holder shall notify the Illinois Environmental Protection Agency (217/782-3637) immediately of any emergency at the mine or mine refuse area which causes or threatens to cause a sudden discharge of contaminants into the waters of Illinois and shall immediately undertake necessary corrective measures as required by Rule 405.111 under Chapter 1, Subtitle D: Mine Related Water Pollution of Illinois Pollution Control Board Rules and Regulations.

**SPECIAL CONDITION 4.** Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

**SPECIAL CONDITION 5. Discharge Monitoring Reports:** The Permittee shall record monitoring results on discharge Monitoring Report (DMR) Forms using one such form for each outfall each month. If there is no discharge during a reporting period, a Discharge Monitoring Report shall be submitted stating that no discharge occurred during that particular month. The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information about the NetDMR program, including registration, can be obtained on the IEPA website at <http://www.epa.state.il.us/water/net-dmr/index.html>. The completed DMR forms shall be submitted monthly to the IEPA no later than the 15<sup>th</sup> day of the following month, unless otherwise specified by the IEPA. Permittees not using NetDMRs shall mail the DMRs with original signature to the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276  
Attn: Compliance Assurance Section, Mail Code #19

**SPECIAL CONDITION 6.** The permittee shall notify the Agency in writing by certified mail within thirty days of abandonment, cessation, or suspension of active mining for thirty days or more unless caused by a labor dispute. During cessation or suspension of active mining, whether caused by a labor dispute or not, the permittee shall provide whatever interim impoundment, drainage diversion, and wastewater treatment is necessary to avoid violations of the Act or Subtitle D, Chapter 1.

**SPECIAL CONDITION 7.** The Agency must be informed in writing and an application submitted if drainage, which was previously classified as alkaline (pH greater than 6.5), becomes acid (pH less than 6.5) or ferruginous (base flow with an iron concentration greater than 10 mg/l). The type of drainage reporting to the basin should be reclassified in a manner consistent with the applicable rule of 35 Ill. Adm. Code 406 as amended in R84-29 at 11 Ill. Reg. 12899. The application should discuss the treatment method and demonstrate how the discharge will meet the applicable standards.

**SPECIAL CONDITION 8. Storm Water Discharges:** The Illinois Environmental Protection Agency has determined that the effluent limitations for the non-coal outfall(s) in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit issuance, and no pollution prevention plan will be required for such storm water. This does not preclude the use of pollution prevention techniques as a means or partial means of meeting the effluent limits. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with mining and determine whether any facility modifications have occurred which result in previously treated storm water discharges no longer receiving treatment. If any such discharges are identified, the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and shall be made available to the Illinois Environmental Protection Agency upon request.

**SPECIAL CONDITION 9. Prohibited Storm Water Discharges:** This permit is not applicable to storm water discharges from the following facilities:

- a. Hazardous waste treatment, storage or disposal facilities.
- b. Storm water discharges associated with inactive mining occurring on Federal lands where an operator cannot be identified.



Special Conditions

**SPECIAL CONDITION 10. Oil and Hazardous Substance Liability:** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA.

**SPECIAL CONDITION 11. Oil and Hazardous Substance Discharge Prohibition:** This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill, and does not supersede any reporting requirements for spills or releases of hazardous substances or oil.

**SPECIAL CONDITION 12. Bulk Storage and Hazardous Waste Containment Area:** Provisions for handling storm water from bulk storage and hazardous waste containment areas.

- a. This permit does not authorize the discharge of storm water collected in containment areas at bulk storage and hazardous waste facilities where the storm water becomes contaminated by direct contact with a spill or release of stored materials into the containment area. Such storm water should be handled properly by on-site treatment or hauling off-site for treatment and disposal.
- b. Where a spill or release to a dry containment area occurs, the permittee shall institute procedures to clean up the spill in order to prevent contamination of any storm water, which subsequently collects in the containment area. Where these procedures are followed, collected storm water may be discharged; following visual inspection to assure that the storm water contains no unnatural turbidity, color, oil films, foams, settleable solids, or deposits.
- c. Storage piles of salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). Piles of salt do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the state or the discharges from the piles are authorized under another permit.

**SPECIAL CONDITION 13. Reopener:** This permit may be modified to include different discharge limitations or other requirements which are consistent with applicable laws, regulations, or judicial orders. The Agency will public notice the permit modification.

**SPECIAL CONDITION 14. Definitions:**

**"Acid Producing Material" ("APM")** means material which when exposed to air and water is capable of causing drainage containing sulfuric acid. In determining whether material is acid producing consideration shall be given to the sulfur content of the material, the size and spatial distribution of pyritic compounds of sulfur, the neutralizing effect of surrounding intermixed materials and the quality of drainage produced by mining on sites with similar soils.

**"Alkaline Mine Drainage"** means mine drainage which, prior to drainage, has a pH equal to or greater than 6.0 and a total iron concentration of less than 10 mg/l.

**"Best Management Practices" ("BMPs")** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**"Commencement of Mining"** means the initial disturbance of soils associated with clearing, grading, or excavating activities or other mining activities.

**"Cooling water"** means mine process wastewater that is used for cooling of mining operations and is contaminated with heat. Heated effluent and cooling water that contains cleaning chemicals, pesticides or treatment chemicals used to clean or treat the piping, equipment or discharge of the cooling system are not covered by this permit.

**"Cooling water outfalls"** means point sources that discharge cooling waters or heated effluents.

**"CWA"** means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.)

**"Director"** means the Director of the Illinois Environmental Protection Agency or an authorized representative.

**"EPCRA"** means the Emergency Planning and Community Right-to-Know Act (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986)

Special Conditions

**"Final Stabilization"** means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% cover for unpaved areas and areas not covered by permanent structures has been established or equivalent stabilization measures (such as the use of riprap, gabions or geotextiles) have been employed.

**"Heated effluent"** means mine process wastewater contaminated with heat from mining operations.

**"Large and Medium municipal separate storm sewer system"** means all municipal separate storm sewers that are either:

- a) Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or
- b) Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or
- c) Owned or operated by a municipality other than those described in paragraph (a) or (b) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

**"Mine Area or Mined Area"** means the surface and subsurface land where mining has occurred or is occurring. The term does not include the unmined surface land directly above underground mine workings which is not otherwise disturbed by mining activities.

**"Mine Process Wastewater or Process Wastewater"** means waters used for or generated from: cooling of mining and mine processing equipment; mineral processing plants; cleaning mining and mining processing equipment; air emission controls (e.g. dust control); pit pumpage; pit overflows; mine dewatering; sedimentation ponds; or surface runoff from disturbed areas that contain mine refuse; chemical spillage; other wastes or acid producing materials.

**"Mining"** means the surface or underground extraction or processing of natural deposits of, gravel, sand or stone by the use of any mechanical operation or process. The term also includes the recovery or processing of the minerals from a mine refuse area. It does not include drilling for oil or natural gas.

**"Mining Activities"** means all activities on a facility which are directly in furtherance of mining, including activities before, during and after mining. The term does not include land acquisition, exploratory drilling, surveying and similar activities. The term includes, but is not limited to, the following:

- a) Preparation of land for mining activities;
- b) Construction of mine related facilities which could generate refuse, result in a discharge or have the potential to cause water pollution;
- c) Ownership or control of a mine related facility;
- d) Ownership or control of a coal storage yard or transfer facility;
- e) Generation or disposal of mine refuse;
- f) Mining;
- g) Opening a mine;
- h) Production of a mine discharge or non-point source mine discharge;
- i) Surface drainage control; and
- j) Use of acid-producing mine refuse.

**"NOI"** means notice of intent to be covered by this permit.

**"Mine Outfalls"** means point sources that discharge mine dewatering waters, process wastewaters, pit pumpage or pit overflows.

**"Point Source"** means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, mine discharge, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

**"Runoff coefficient"** means the fraction of total rainfall that will appear at the conveyance as runoff.

**"Significant materials"** includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Special Conditions

**"Significant spills"** includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

**"Storm Water"** means storm water runoff, snow melt runoff, surface runoff and drainage.

**"Storm Water Discharges"** means discharges that contain only storm water.

**"Storm Water Associated with Industrial Activity at a Mining Site"** means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at a mining site. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of mining sites identified in subparagraphs (i), (ii) and (iii) of this subsection definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated) that meet the description of the facilities listed in this paragraph (i), (ii) and (iii) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity at a mining site" for purposes of this definition:

- i) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(l)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;
- ii) Construction activity including clearing, grading and excavation activities that disturbs land area at a mining site.
- iii) Any asphalt plant, ready mix plant or industrial facility with SIC Code 29 or 32 located on the mining site.

**"Waters"** mean all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable. Note that additional definitions are included in the permit Standard Conditions, Attachment H.

Construction Authorization

Authorization is hereby granted to the above designee to construct the mine and mine refuse area described as follows:

The facility is an existing, approximately 80 acre silica sand mine, designated as Buzzi Unicem, Lone Star Industries, Inc. d/b/a Buzzi Unicem USA - Tamms Quarry, located in Section 36, Township 14S, Range 2W of the 3rd P.M. in Alexander County, Illinois near Tamms. Mining operations include the surface excavation and loadout of silica sandstone deposits. Mine operations include the removal and stockpiling of overburden for later use in reclamation. Mine operations result in the discharge of groundwater seepage and stormwater runoff from outfall 001 at an average discharge rate of 0.1 MGD to an unnamed tributary of Sandy Creek.

The abandonment plan consisting of the application documents received on February 4, 2014 shall be executed and completed in accordance with Rule 405.109 of Subtitle D: Mine Related Water Pollution.

The issuance of this permit (a) shall not be considered as in any manner affecting the title of the premises upon which the mine or mine refuse area is to be located; (b) does not release the permittee from any liability for damage to person or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (c) does not take into consideration the structural stability of any units or parts of the project; and (d) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or with applicable local laws, regulations or ordinances.

This permit may be automatically transferred to a new permittee in accordance with Standard Condition 15(b) (Automatic transfers) Attachment H of this permit provided the written agreement includes a statement that the new permittee plans to meet the provisions of the abandonment plan submitted by the existing permittee and approved by the Agency for coverage under this permit. If a new or modified abandonment plan is submitted with the transfer request, coverage may not be automatically transferred under this permit.

There shall be no deviations from the approved plans and specifications unless revised plans, specifications and application shall first have been submitted to the Illinois Environmental Protection Agency and a supplemental permit issued.

The permit holder shall notify the Illinois Environmental protection Agency (217/782-3637) immediately of any emergency at the mine or mine refuse area which causes or threatens to cause a sudden discharge of contaminants into the waters of Illinois and shall immediately undertake necessary corrective measures as required by Rule 405.111 under Chapter 1, Subtitle D: Mine Related Water Pollution of Illinois Pollution Control Board Rules and Regulations.

Final plans, specifications, application and supporting documents as submitted and approved shall constitute part of this permit and are identified in the records of the Illinois Environmental Protection Agency, by the permit number designated in the heading of this section.

## NPDES PERMIT NO. IL0080061

Attachment H  
Standard Conditions**Definitions**

**Act** means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

**Agency** means the Illinois Environmental Protection Agency.

**Board** means the Illinois Pollution Control Board.

**Clean Water Act** (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

**NPDES** (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

**USEPA** means the United States Environmental Protection Agency.

**Daily Discharge** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

**Maximum Daily Discharge Limitation** (daily maximum) means the highest allowable daily discharge.

**Average Monthly Discharge Limitation** (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Discharge Limitation** (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Best Management Practices** (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Aliquot** means a sample of specified volume used to make up a total composite sample.

**Grab Sample** means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

**24-Hour Composite Sample** means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

**8-Hour Composite Sample** means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

**Flow Proportional Composite Sample** means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- (2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.
- (6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.
- (9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:
  - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.
- (10) **Monitoring and records.**
  - (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.
  - (c) Records of monitoring information shall include:

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- (1) The date, exact place, and time of sampling or measurements;
  - (2) The individual(s) who performed the sampling or measurements;
  - (3) The date(s) analyses were performed;
  - (4) The individual(s) who performed the analyses;
  - (5) The analytical techniques or methods used; and
  - (6) The results of such analyses.
- (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.
- (11) **Signatory requirement.** All applications, reports or information submitted to the Agency shall be signed and certified.
- (a) **Application.** All permit applications shall be signed as follows:
    - (1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation;
    - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
    - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
  - (b) **Reports.** All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - (1) The authorization is made in writing by a person described in paragraph (a); and
    - (2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and
    - (3) The written authorization is submitted to the Agency.
  - (c) **Changes of Authorization.** If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
  - (d) **Certification.** Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:
 

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system 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, 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 possibility of fine and imprisonment for knowing violations.
- (12) **Reporting requirements.**
- (a) **Planned changes.** The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required when:
    - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b); or
    - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).
    - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
  - (b) **Anticipated noncompliance.** The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
  - (c) **Transfers.** This permit is not transferable to any person except after notice to the Agency.
  - (d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
  - (e) **Monitoring reports.** Monitoring results shall be reported at the intervals specified elsewhere in this permit.
    - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
    - (2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
    - (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.
  - (f) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:
    - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit.
    - (2) Any upset which exceeds any effluent limitation in the permit.
    - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.

The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24-hours.
  - (g) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).
  - (h) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.
- (13) **Bypass.**
- (a) Definitions.
    - (1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
    - (2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
  - (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).
  - (c) Notice.
    - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
    - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).
  - (d) Prohibition of bypass.
    - (1) Bypass is prohibited, and the Agency may take enforcement action against a permittee for bypass, unless:
      - (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      - (iii) The permittee submitted notices as required under paragraph (13)(c).
    - (2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).

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- (14) **Upset.**
- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
  - (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
  - (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
    - (2) The permitted facility was at the time being properly operated; and
    - (3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).
    - (4) The permittee complied with any remedial measures required under paragraph (4).
  - (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
- (15) **Transfer of permits.** Permits may be transferred by modification or automatic transfer as described below:
- (a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
  - (b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:
    - (1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
    - (2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
    - (3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
    - (1) One hundred micrograms per liter (100 ug/l);
    - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
    - (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
    - (4) The level established by the Agency in this permit.
  - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.
- (17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
- (a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
  - (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
  - (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
- (a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
  - (b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
  - (c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
- (19) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.