

**STORM WATER POLLUTION PREVENTION PLAN
FOR CONSTRUCTION ACTIVITIES**

Prepared for:

Unimin Corporation
Guion Facility

Date: March 22, 2011

Prepared by:
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Revised:

**UNIMIN CORPORATION - GUION, ARKANSAS
STORM WATER POLLUTION PREVENTION PLAN
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SITE DESCRIPTION

Pre-Construction Post-Construction Topographic View

See Appendix A – Project Site Topographic Maps

Nature of Construction Activity and its Intended Use after the NOT is filed

The construction activity is Pond T Construction. The area will be a tailings pond for the Guion Plant (SIC code 1446).

Description of Intended Sequence of Pond Construction

1. Install and maintain BMPs in locations shown on the SWP3 Project Site Plan;
2. Begin construction of Pond T;
3. Finish construction of Pond T;
4. Seed all embankments
5. Armor the embankment on the White Side
6. Perform final cleanup of project site;
7. Remove temporary erosion control measures after site is stabilized

Estimates of the Total Area of the Site

The total area of the Pond T site is about 12.6 acres. The total area to be disturbed by the Owner is about 12.6 acres

Estimate of Runoff Coefficient of the Site for Pre- and Post-Construction Activities and Existing Data Describing the Soil or The quality of a Discharge from the Site.

The CN for the Pre-Construction 12.6 acres is 58 (B Soils, Pasture or Rangeland, good condition). The runoff Coefficient is 0.14.

The CN for the Post-Construction 12.6 acres must be divided into internal and external drainage. The CN for the internal drainage area (8.6 acres) is 96 (Water 7.8 acres, slopes 0.8 acres. The CN for the external drainage area when revegetated (4 acres) is 61.

Soil Data

Soil Types

See Appendix D – Soils Information

Sturkie silt loam, occasionally flooded. Soil type B.

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RESPONSIBLE PARTIES

Mr. Steve Bell will oversee activities of construction of Pond T and will be responsible for all storm water related activities. Mr. Gary Blankenship will be responsible for activities related to storm water related inspections.

RECEIVING WATERS

THE LOCATION OF SURFACE WATERS ON THE CONSTRUCTION SITE

There are no surface waters on the construction site. The receiving stream is the White River (Segment 4F). The USGS hydrologic unit code for the referenced stream is 11010004.

DOCUMENTATION OF PERMIT ELIGIBILITY RELATED TO THE 303 (D) LIST AND TOTAL MAXIMUM DAILY LOAD (TMDL)

The Segment 4F of the White River is not listed in the 2008 303(d).

ATTAINMENT OF WATER QUALITY STANDARDS AFTER AUTHORIZATION

Best Management Practices (BMPs) have been selected and will be installed and maintained to minimize the discharge of pollutants from the site. In the event ADEQ determines that the discharge may cause, have the potential to cause, or contribute to an excursion above and applicable standard, as supplemental BMP action plan describing SWPPP modifications to adequately address the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards or cease discharges of pollutants from construction activity and submit and individual permit application. All written responses will include a signed certification.

ENDANGERED SPECIES

An Endangered and Threatened Species Evaluation Form was completed and submitted to the U.S. Fish and Wildlife Service in Conway, Arkansas on April 11, 2011. A copy of this form and U.S. Fish and Wildlife response is attached to this document. See Appendix C

SITE MAP

A project site map is attached. See Appendix B.

STORM WATER CONTROLS

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The area outlined around Proposed Pond T will be disturbed. Buffer Zones will be protected and maintained. The area is about 12.6 acres.

During the initial site construction period, the following controls will be implemented.

1. A silt fence will be installed around the perimeter of the proposed construction;
2. Litter, construction debris and trash will be collected and disposed of consistent with existing regulatory compliant waste management methods;
3. No offsite material storage areas are planned.

STABILIZATION PRACTICES

All control measures will be properly selected, installed, and maintained in accordance with the manufacturer's specifications, good engineering, and construction practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the control will be replaced or modified for site situations.

If sediment escapes, the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off site impacts. No offsite accumulations of sediment are anticipated.

Description and Schedule

Initial Stabilization

1. Compact and stabilize the pond embankment.

Interim Stabilization

During construction activities, disturbed areas will be inspected weekly to determine if additional efforts are needed.

Final Stabilization

Final compaction of the embankment and placement of suitable rock to finalize stabilization of the embankment. All embankment slopes will be seeded prior to rock placement.

Description of Buffer Areas

A buffer area will be maintained between the proposed pond and the White River. The buffer area is about 1.4 acres and a minimum of 25 feet wide. The buffer area is shown on all maps. The buffer area is tame hayland.

Records of Stabilization

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Records of stabilization will be maintained consistent with the Weekly Inspection Form (See Appendix E). These records will document dates when construction activities occur, when construction activities temporarily or permanently cease and when stabilization measures are initiated.

Deadlines for Stabilization

In the event construction activities of the pond will resume within twenty-one (21) days of temporary cessation of activities, stabilization will be initiated as soon as practicable. In portions of the site where no construction activities are planned for a minimum of twenty-one days (21) days, stabilization efforts will commence within fourteen (14) days of initial disturbance at those areas.

Stabilization of the out slopes not covered by suitable rock will be seeded as soon as practical after construction.

Structural Practices

No structural devices are needed. All runoff from the site will be sheet flow to the silt fences or drain internally to the pond.

OTHER CONTROLS

No solid materials, including building materials will be allowed to discharge to waters of the State by implementing sound waste management practices. No construction other than the embankment construction is expected.

Because the construction of the pond is located over 3500 feet from the gravel county road (co Rd 157), no offsite vehicle tracking is expected. However, daily observations will be made to insure that off-site tracking of sediment is not occurring. In the event it becomes necessary, a construction entrance will be constructed and maintained during construction activities. The construction entrance will be checked on a daily basis for excess mud, dirt, or rock tracked from the site with the excess material removed and disposed of properly.

The project is not located within the service area of a municipal sanitary sewer system. The office is served by a subsurface septic tank/leach field disposal system. To insure compliance with State and local waste disposal sanitary sewer regulations, construction workers at the project site will use portable toilet.

Since not concrete is planed for this project, a concrete washout is not planned.

No off-road diesel will be stored on the construction site.

Chemicals or any other hazardous material will not be stored on this site at any time in a manner which could be exposed to storm water. Other significant materials, such as solvents, detergents, waste products, fertilizers and pesticides also will not be used or exposed to storm water. Organic debris from construction will be disposed of properly according to state and local regulations

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consisting of hauling materials to landfills. Organic debris from construction activities will not be allowed to enter waters of the State.

NON-STORM WATER DISCHARGES

No non-storm water discharges are anticipated. Activities related to dust suppression will occur only during extended periods of dry weather. Water will be added to the fill to ensure that compaction requirements are met.

POST-CONSTRUCTION STORM WATER MANAGEMENT

Silt fence/Wattle sediment barriers will be removed from the site once the barrier's function is no longer viable. No other post-construction storm water management measures are needed.

APPLICABLE STATE OR LOCAL PROGRAMS

This project is not located within the jurisdiction of a Municipal Separate Storm Sewer System (MS4). This SWPPP will be updated as necessary in the event federal, state, or local official determine that revisions in the plan are necessary.

INSPECTIONS

Inspections will be conducted by qualified personnel and will include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Erosion and sedimentation controls will be observed to ensure proper operation. Locations where vehicles enter or exit the site will be inspected for offsite tracking.

Inspection Frequency

Inspections will occur at least every 7 days.

Inspection Form

See Appendix E

Inspection Records

Records of inspections will be retained as a part of this plan for a period of three (3) years.

Winter Conditions

Regular inspections are required at all times with the exception of periods of snow cover over the entire site for an extended period in the absence of melting conditions.

Maintenance

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Maintenance activities will be recorded on the inspection form with needed repairs to follow within three (3) business days of discovery or as otherwise directed by state or local officials. In the event conditions at the site do not permit large equipment to be utilized, a longer time frame may be needed. This type of condition will be documented on the inspection form. Maintenance for manufactured controls will be performed at a minimum of the manufacturer's specifications. Maintenance for non-manufactured controls will be performed when control is operating at fifty per cent (50%) capacity.

CONTRACTORS

Unimin Corporation will perform all storm water related activities.

INSPECTORS

Mr. Gary Blankenship will perform all storm water related inspections. In the event that Mr. Blankenship does not perform storm water related inspections, he or Mike Maloney, Plant Manger, will designate qualified persons to perform inspections.

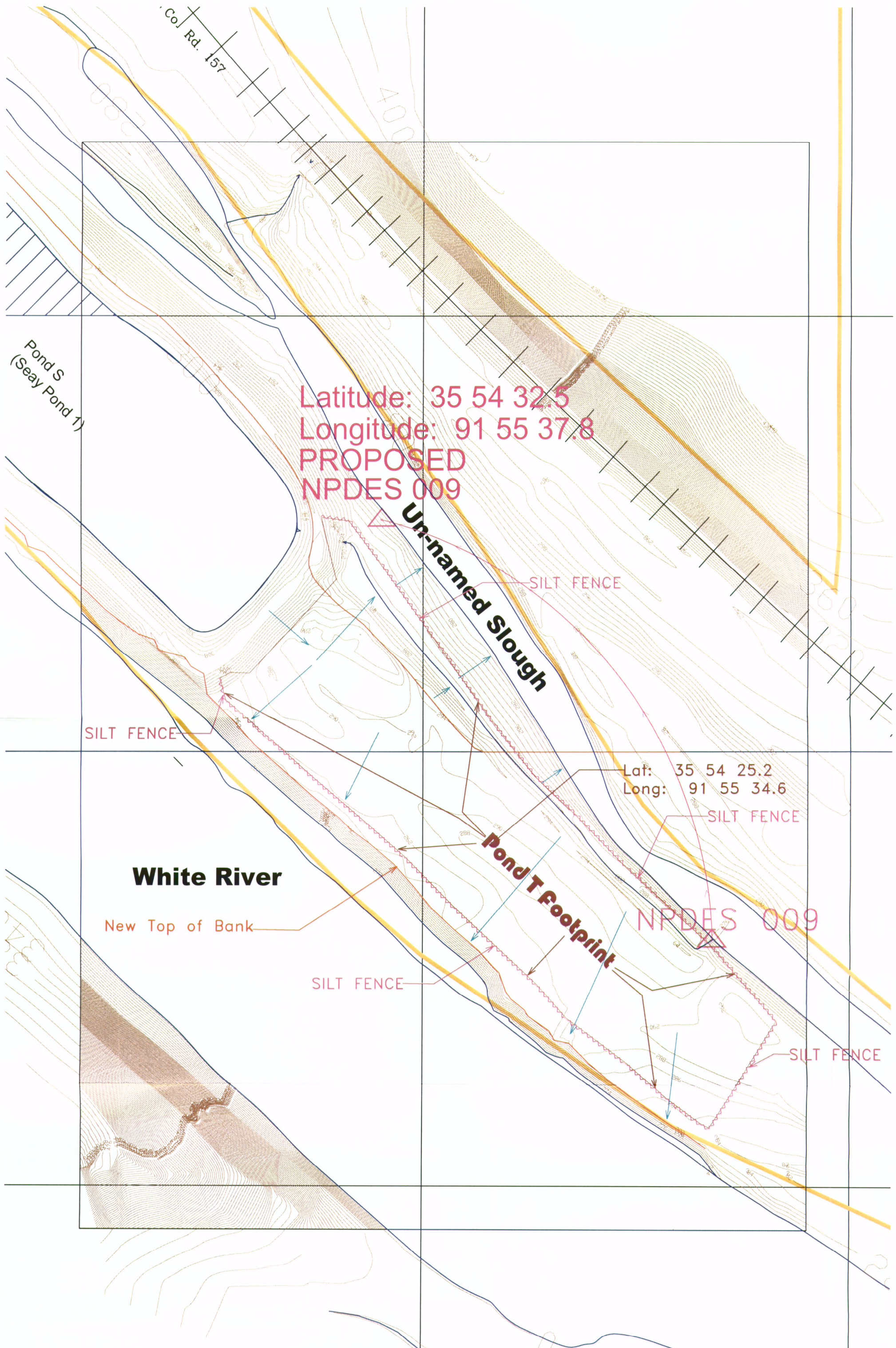
PLAN CERTIFICATION

The Storm Water Pollution Prevention Plan Certification is shown in Appendix F.

APPENDIX A

Site Topography Maps
Pre Construction (Map 2)
Post-Construction (Map 3)

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Latitude: 35 54 32.5
Longitude: 91 55 37.8
**PROPOSED
NPDES 009**

Un-named Slough

SILT FENCE

SILT FENCE

Lat: 35 54 25.2
Long: 91 55 34.6

SILT FENCE

White River

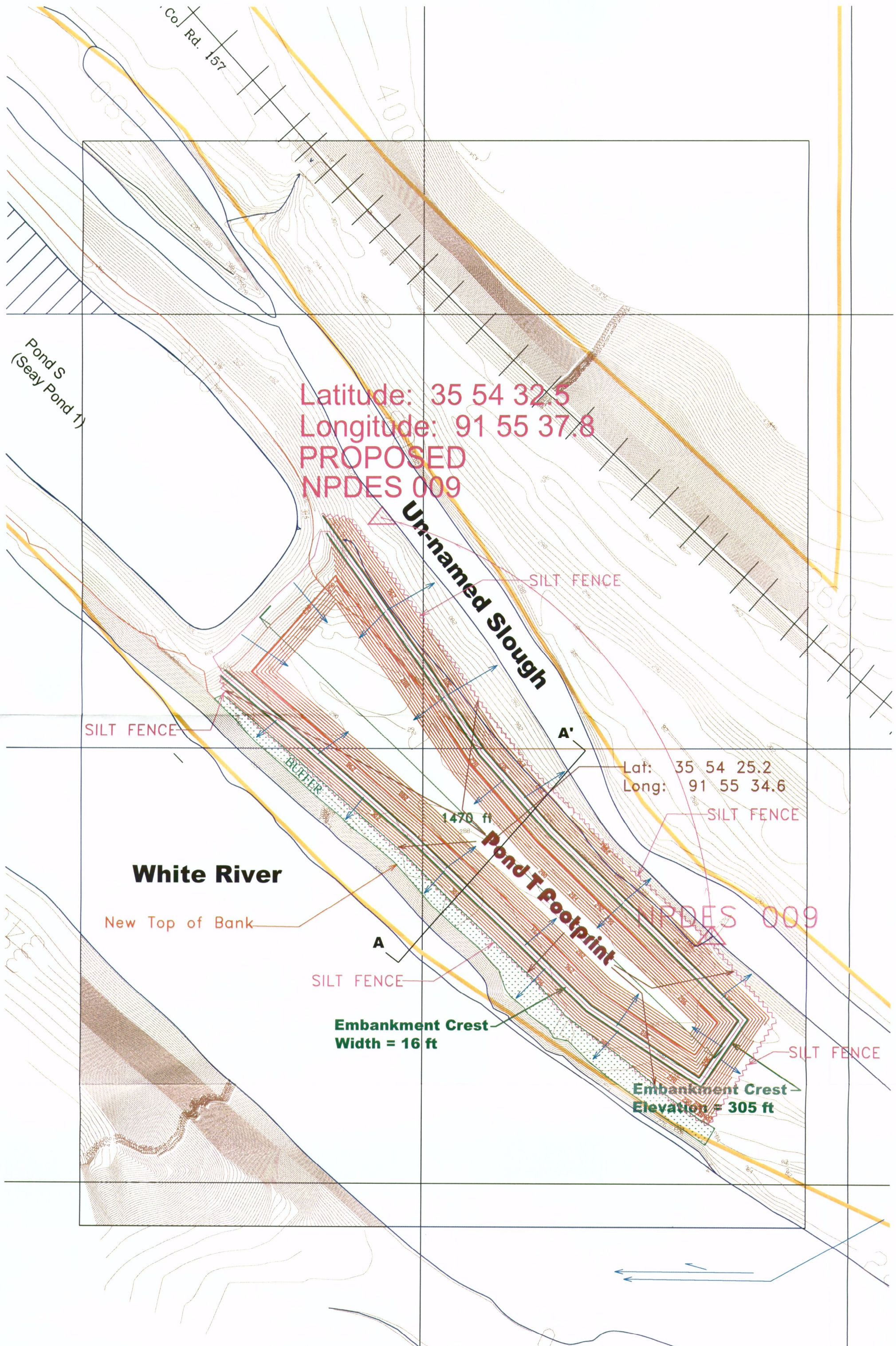
New Top of Bank

Pond T Footprint

NPDES 009

SILT FENCE

SILT FENCE



APPENDIX B

Project Site Map (Map 1)

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**MAP(S)/PLAN(S) SCANNED IN
SEPARATE FILE**

APPENDIX C

Endangered Species Letter/Form/Response

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FILE COPY

4000 Baker Road · Ottawa, IL 61350
(Phone) 815/434/4178 · (Fax) 815/434/3828

April 11, 2011

U.S. Fish and Wildlife Service
Arkansas Field Office
110 south Amity Road, Suite 300
Conway, AR 72032

**RE: Construction Storm Water Permit
Endangered and Threatened Species Evaluation Form
Unimin Corporation – Guion Plant**

Dear Sir/Madam:

Unimin Corporation is proposing to construct a tailings pond for the Guion Facility. This proposed construction of Pond T was previously reviewed under NPDES Permit AR0001899, issued February 28, 2011. A copy of the Statement of Basis is attached. Also attached is a signed Endangered and Threatened Species Evaluation Form.

The project name is "Guion Pond T". The proposed construction is located in Izzard County. The estimated disturbance area is about 12.6 acres. The geographic coordinates of the project location are: Latitude: 35 54 25.1 Longitude: 91 55 34.6.

The address to send the response is:

Donald F. Higgins
Unimin Corporation
4000 Baker Road
Ottawa, IL 61350

Also enclosed are a USGS Quadrangle Map, Location Map and an aerial photo of the activity.

If you have any questions or require any additional information, please contact me at dhiggins@unimin.com, phone: 815 431-2208, or at the above address.

Respectfully,
Unimin Corporation

A handwritten signature in dark ink, appearing to read "Donald F. Higgins".

Donald F. Higgins, P.E.
Mgr./Environmental Engineering

Enclosures

CC: M. Maloney
B. Shalter

INSTRUCTIONS

Evaluate individual project sites for federally listed threatened or endangered species using the step process presented below.

STEP 1

Does your project occur within one of the following counties? **Projects occurring in the counties listed below may proceed to Step 10.**

Cleveland ☐
Lonoke ☐
Nevada ☐

Projects not occurring in one of the aforementioned counties must proceed to Step 2.

STEP 2

Does your project occur within 660 feet of a bald eagle nest?

Yes ☐ **See instructions below.**
No ☒ **All other projects proceed to Step 3.**

Projects occurring within 660 feet of a bald eagle nest, including alternate nests, are likely to disturb nesting bald eagles (a potential violation of the Bald and Golden Eagle Protection Act). Proceed to the U. S. Fish and Wildlife Service website (<http://www.fws.gov/southeast/es/baldeagle>) to determine if the new or intermittent activity is likely to disturb nesting bald eagles and measures that you can take to avoid that disturbance. **Print three copies of the signature (Determination) page and submit one with your ADEQ permit application package, submit one copy to the U. S. Fish and Wildlife Service at 110 South Amity Road Suite 300, Conway, AR, and keep one copy for your records.**

Once the above is completed, projects occurring in Greene or Lincoln counties proceed directly to Step 10, all others proceed to Step 3.

STEP 3

Does your project occur within 0.5 mile of a red-cockaded woodpecker cavity **AND** within one of the following counties?

Yes ☐ See instructions below and then proceed to Step 4.
No ☒ Proceed to Step 4.

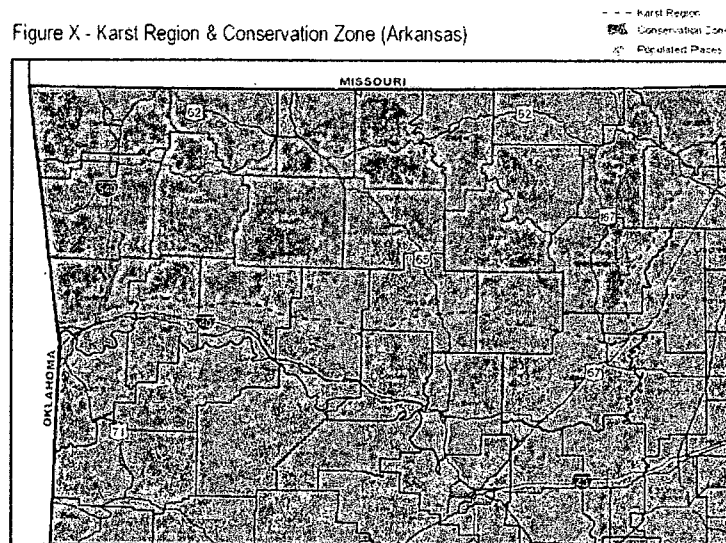
Ashley	<input type="checkbox"/>	Grant	<input type="checkbox"/>
Bradley	<input type="checkbox"/>	Lafayette	<input type="checkbox"/>
Calhoun	<input type="checkbox"/>	Monroe	<input type="checkbox"/>
Clark	<input type="checkbox"/>	Polk	<input type="checkbox"/>
Columbia	<input type="checkbox"/>	Scott	<input type="checkbox"/>
Dallas	<input type="checkbox"/>	Union	<input type="checkbox"/>
Drew	<input type="checkbox"/>		

If you answered "Yes" to Step 3, refer to the U. S. Fish and Wildlife Service Private Lands Guidelines (http://www.fws.gov/rcwrecovery/private_land_guidelines.pdf) for potentially harmful activities that may harass and/or harm red-cockaded woodpeckers (a violation of the Endangered Species Act). **Checking "Yes" to Step 3 requires a concurrence letter from the U. S. Fish and Wildlife Service that should accompany your ADEQ permit application package and possibly a permit from the U. S. Fish and Wildlife Service (501-513-4481).** Any and all other endangered species issues will be evaluated when your information is submitted to the U.S. Fish and Wildlife Service.

STEP 4

Does your project occur within the delineated karst conservation zone (see map below)?

Figure X - Karst Region & Conservation Zone (Arkansas)



- Yes ☒ See instructions below and then proceed to Step 5.
No ☐ Proceed to Step 5.

If you answered "Yes" to Step 4, contact the US Fish and Wildlife Service (Service) Arkansas Field Office (501-513-4477) in advance of permit application as a concurrence letter from the Service may be necessary as a part of your NPDES/SWPPP application package. It may also require a Service section 10 endangered species permit. While the Service is interested in the proposed project due to its location, many areas within the karst conservation zone only require the standard recommendations below. Early contact with this office allows time to develop site specific recommendations which streamlines the permit issuance process. Any and all other endangered species issues will be evaluated when your information is submitted to the U.S. Fish and Wildlife Service. If the proposed project falls outside the delineated karst conservation zone but within karst counties (region), the following recommendations apply. If there are any questions on the recommendations, do not hesitate to contact the U. S. Fish and Wildlife Service.

The karst region in Arkansas is as an area with a relatively shallow soil profile where climatic events or stormwater runoff quickly infiltrates and is transported through underground passages contributing to the groundwater basin. The karst region in Arkansas supports 6 endangered species including the Ozark cavefish (*Amblyopsis rosae*), the Benton cave crayfish (*Cambarus aculabrum*), the Hell creek crayfish (*Cambarus zophonastes*), the gray bat (*Myotis grisescens*), the Indiana bat (*Myotis sodalis*), the Ozark big-eared bat (*Corynorhinus townsendii ingens*), and 19 globally imperiled karst dependent species.

If your project occurs outside the delineated karst conservation zone (map above) but within other portions of the nineteen karst counties (karst region), the Service recommends the following conservation measures.

- 1) Survey for karst features including caves, springs, and sinkholes prior to initiating project activities. If such a feature is found, establish a 300 foot conservation zone around its location and contact the Service for an onsite karst evaluation.
- 2) If caves are excavated during construction activities, the Service requests that work efforts cease within 300 feet of the opening. The opening should be adequately marked, fill material should not be placed in the cave, personnel shouldn't enter the cave, and the Service should be contacted immediately for an onsite evaluation.
- 3) While sediment mobilization is the primary concern during construction; stormwater runoff following project completion may contain oil/grease, sealants, tar, brake dust, herbicides, pesticides, and additional sediment. To reduce threats to surface and groundwater from these contaminants, the Service recommends the use of post construction stormwater management techniques including detention basins or separation systems with a 100 foot bioswale. However, other post

construction stormwater management methods are available, these would be considered if documentation of successful use is provided to the Service prior to installation.

- 4) Apply and maintain construction BMP's that were developed specific for the project site.

Proceed to Step 5.

STEP 5

Does your project occur involve instream activities (bridges, bank rip-rap, culverts, channel alteration, etc.) **AND** occur in one of the following streams?

- | | |
|---|--------------------------|
| Alum Fork Saline River | <input type="checkbox"/> |
| Archey Fork Little Red River | <input type="checkbox"/> |
| Bayou Dorcheat | <input type="checkbox"/> |
| Beech Fork Little Red River | <input type="checkbox"/> |
| Big Creek (south flowing tributary to Little Red River) | <input type="checkbox"/> |
| Black River | <input type="checkbox"/> |
| Buffalo Creek (Polk County) | <input type="checkbox"/> |
| Caddo River | <input type="checkbox"/> |
| Clabber Creek | <input type="checkbox"/> |
| Cossatot River | <input type="checkbox"/> |
| Current River | <input type="checkbox"/> |
| Devils Fork Little Red River | <input type="checkbox"/> |
| Ditches, sloughs, and bayous in the St. Francis River basin | <input type="checkbox"/> |
| Eleven Point River | <input type="checkbox"/> |
| Fiddler's Creek (Montgomery County) | <input type="checkbox"/> |
| Fourche La Fave River (Scott County) | <input type="checkbox"/> |
| Frog Bayou | <input type="checkbox"/> |
| Gailey Hollow (Benton County) | <input type="checkbox"/> |
| Healing Spring (Washington County) | <input type="checkbox"/> |
| Illinois River | <input type="checkbox"/> |
| Irons Fork Ouachita River (Montgomery and Yell counties) | <input type="checkbox"/> |
| L'Anguille River | <input type="checkbox"/> |
| Left Hand Chute Little River | <input type="checkbox"/> |
| Little Missouri River | <input type="checkbox"/> |
| Little River | <input type="checkbox"/> |
| Middle Fork Little Red River | <input type="checkbox"/> |
| Middle Fork Saline River | <input type="checkbox"/> |

Mississippi River	<input type="checkbox"/>
Mountain Fork Little River	<input type="checkbox"/>
Muddy Creek (Montgomery County)	<input type="checkbox"/>
Mulberry River	<input type="checkbox"/>
Myatt Creek (Fulton County)	<input type="checkbox"/>
North Fork Ouachita River	<input type="checkbox"/>
North Fork Saline River	<input type="checkbox"/>
Osage Creek and spring fed tributaries	<input type="checkbox"/>
Ouachita River	<input type="checkbox"/>
Palmer Hollow (Benton County)	<input type="checkbox"/>
Poteau River	<input type="checkbox"/>
Right Hand Chute Little River	<input type="checkbox"/>
Robinson Creek	<input type="checkbox"/>
Saline River (both Saline Rivers)	<input type="checkbox"/>
South Fork Little Red River	<input type="checkbox"/>
South Fork Ouachita River	<input type="checkbox"/>
South Fork Saline River	<input type="checkbox"/>
South Fork Spring River	<input type="checkbox"/>
St. Francis River	<input type="checkbox"/>
Strawberry River	<input type="checkbox"/>
Turkey Creek (Little Red River)	<input type="checkbox"/>
Tyronza River	<input type="checkbox"/>
White River (downstream of Batesville)	<input type="checkbox"/>
Wildcat Creek (Washington County)	<input type="checkbox"/>
Wilson Spring (Washington County)	<input type="checkbox"/>

Yes ☐ See instructions below.
 No ☒ Proceed to Step 6.

If you answered "Yes" to Step 5, a concurrence letter from the U. S. Fish and Wildlife Service should accompany your ADEQ permit application package. **MUSSEL SURVEYS MAY BE REQUIRED BY THE U. S. FISH AND WILDLIFE SERVICE PRIOR TO THEIR CONCURRENCE ON THE PROJECT.** Planning ahead is strongly advised in this situation. Any and all other endangered species issues will be evaluated when your information is submitted to the U.S. Fish and Wildlife Service.

STEP 6

Does your project occur within 0.5 mile of the Arkansas River, White River, Mississippi River, or Red River?

- Yes ☒ Follow instructions below.
No ☐ Proceed to Step 7.

If you answered "Yes" and are willing to implement the recommendations below, a concurrence letter from the U. S. Fish and Wildlife Service is not necessary and you can proceed to Step 7. If you are unable to implement the guidelines below, a concurrence letter from the U. S. Fish and Wildlife Service should accompany your ADEQ permit application package. Implementing the following U. S. Fish and Wildlife Service guidelines will prevent harassment and/or harm of Interior Least Tern populations.

1. The critical nesting period for the Interior Least Tern is between 15 May and 1 August. Nesting may extend beyond these dates depending on river stage elevations. If surveys reveal Interior Least Tern breeding activities within 0.5 mile of a proposed activity during this time period, no activity should proceed unless otherwise approved by the U. S. Fish and Wildlife Service (501-513-4470).
2. No activities should take place closer than 1,000 feet of the shoreline of a nesting colony location. The U. S. Fish and Wildlife Service should be contacted for further consultation if activities are to proceed within 1,000 feet of the shoreline of a nesting colony location. Limited construction outside of the active nesting season may not affect Interior Least Tern. Detailed project description, designs, and construction date information is necessary for U. S. Fish and Wildlife Service concurrence.
3. Employees and/or contractors should be instructed that under no circumstances (other than emergencies) are they permitted on a nesting island during the aforementioned time period and until after the young have fledged.
4. If, in the process of conducting work, an Interior Least Tern colony is discovered at another location in the vicinity, the above restrictions apply to that colony as well. The U. S. Fish and Wildlife Service should be contacted for consultation and to determine if further action would have any affect.
5. Further consultation with the U. S. Fish and Wildlife Service may be necessary and should be requested if any of these criteria can not be met.

Proceed to Step 7.

STEP 7

Does your project occur within Arkansas, Desha, Jefferson, Lincoln, Monroe, Phillips, Prairie, or Woodruff counties **AND** occur in one or more of the following locations?

1. The mostly contiguous forest primarily in the lower White River floodplain

encompassing the U. S. Fish and Wildlife Service's Cache River and White River National Wildlife Refuges, the Arkansas Game and Fish Commission's Dagmar and Wattensaw Wildlife Management Areas, and adjacent forested private lands. The Ivory-billed Woodpecker potential range generally follows the edge of the large, contiguous forest but also includes:

- a. Forested corridors containing potentially suitable habitat extending outward from the edge of the core contiguous forest until the width decreases to less than 0.25 mile for a distance of more than 0.25 mile, and
 - b. Forested corridors containing potentially suitable habitat along Bayou DeView and Bayou LaGrue extending upstream about ten miles from the forest core.
2. The batture lands of the Mississippi River extending from the vicinity of the mouth of the White River to about 8 – 10 miles south of the mouth of the Arkansas River in Desha County, AR.
 3. The forest encompassing the AGFC Black Swamp WMA and Cache River NWR, and adjacent forested private lands.
 4. The portions of the lower Arkansas River floodplain inside the levees in Desha, Lincoln, and Jefferson counties from the confluence of the Arkansas and Mississippi rivers to about 12 miles upstream of Dam 2.

Yes ☐ See instructions below.
No ☒ Proceed to Step 8.

If you check "Yes" to Step 7, a concurrence letter from the U. S. Fish and Wildlife Service should accompany your permit application package. Planning ahead is strongly advised in this situation. **The U. S. Fish and Wildlife Service may require surveys and more detailed consultation.** Any and all other endangered species issues will be evaluated when your information is submitted to the U.S. Fish and Wildlife Service.

STEP 8

Does your project occur within the area defined below in Franklin, Logan, Sebastian, or Scott counties and include three or more acres of ground disturbance?

Yes ☐ See instructions below.
No ☒ Proceed to Step 9.

Projects resulting in a ground disturbance of three acres or more in areas shaded in light gray in the figure below or private in-holdings within publicly-owned properties (dark

gray shaded areas) and not meeting one of the habitat characteristics listed below must complete an American Burying Beetle survey, and possibly trap and relocation if presence is detected, prior to permit issuance. The northern boundary of this area extends east along Highway 45 from Enterprise near the AR/OK state line to Highway 255, continues east from Highway 255 to the Ft. Chaffee boundary and then north following Ft. Chaffee's boundary to the Arkansas River, from this point extending east the northern boundary is the Arkansas River in Sebastian, Franklin, and Logan counties until reaching Highway 309 at Roseville, from this point extending southeast the eastern boundary is Highway 309 until reaching the southern boundary of the Ozark National Forest, the remaining boundaries to the south and west of this point are represented by county, state, and National Forest ABB Area boundaries.

In general, but not limited to, any one of the following project characteristics exclude the need to conduct an American Burying Beetle survey:

1. Projects with less than three acres of soil disturbance.
2. Soil that is greater than 70 percent sand.
3. Soil that is greater than 70 percent clay.
4. Land where greater than 80 percent of the soil surface is comprised of rock.
5. Land where greater 80 percent of the subsurface soil structure within the top four inches is comprised of rock.
6. Land that has already been developed and no longer exhibits topsoil or leaf litter.
7. Land that is tilled on at least an annual basis.
8. Land that meets the U.S. Army Corps of Engineers definition of wetland.
9. Pine plantations planned for mechanical treatment where stocking density is 750 or more trees per acre (little sunlight to forest floor).
10. Shortleaf pine or mixed pine-hardwood forest stands with 110 square feet per acre or greater overstory basal area and more than 700 stems per acre occupying midstory and understory positions.
11. Land that is bordered by dense urban development (when in doubt request Service concurrence).
12. Land that is surrounded by intensive urbanization (contact the U. S. Fish and Wildlife Service at 501-513-4470 to verify this characteristic)

The Service evaluates numerous other project characteristics such as type, duration, permanency, land use, location, time/season, and habitat to determine if a survey is required. If you have questions regarding the need for a survey, please contact the U. S. Fish and Wildlife Service at 501-513-4470. **American Burying Beetle surveys can only be conducted between May 20 and September 20 and are valid for one year. Please plan ahead.** If you answered "Yes" to Step 9, a concurrence letter from the U. S. Fish and Wildlife Service should accompany your permit application package. Any and all other endangered species issues will be evaluated when your information is submitted to the U.S. Fish and Wildlife Service.

before leaves are active, avoid herbicide applications from flowering through February.

- e. Running Buffalo Clover (*Trifolium stoloniferum*): August through February.
 - f. Harparella (*Ptilimnium nodosum*): May through October. Since this species occurs in stream channels and is typically underwater during this time, we assume it is dormant. It begins growing as stream waters recede in the spring and flowers and fruits in the summer when water in the stream channel is low.
- 3. Maintain native glade and sinkhole pond vegetation by minimizing or avoiding activities in this habitat type.
 - 4. Pondberry is a wetland plant that is often found in sand pond habitats in eastern Arkansas, low sandy ridges in hardwood bottoms in the St. Francis Sunken Lands, and in the Ouachita River bottoms. BMPs directed toward minimizing runoff and erosion or introduction of contaminants into these areas should be employed.

If you answered "Yes" or "Uncertain" to Step 9 AND can not implement the four recommendations listed above OR the project will have direct impacts on federally listed plants, contact the U. S. Fish and Wildlife Service for conservation recommendations prior to project implementation. Any and all other endangered species issues will be evaluated when your information is submitted to the U.S. Fish and Wildlife Service.

STEP 10

There are currently no federally listed threatened or endangered species present in the area of your project.

CERTIFICATION

If you are able to implement the recommendations in this checklist, disturbance of federally listed endangered and threatened species is unlikely. If you can not adopt these recommendations, we suggest that you contact the U. S. Fish and Wildlife Service's Arkansas Field Office for further assistance in determining whether your activity may disturb federally listed species.

AGB (initial)

"I certify that, to the best of my knowledge and belief, all of the information on and attached to this evaluation form is correct, complete, and made in good faith."

AGB (initial)

"I understand that false or fraudulent information on or attached to this evaluation form may subject me to criminal or civil prosecution should the provisions of the Endangered Species Act or Bald and Golden Eagle Protection Act be violated."

AGB (initial)

"I understand that any information given may be verified."

"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 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."

Andrew G. Bradley
Print Name and Title

[Signature]
Signature

3/24/11
Date

We recommend printing this evaluation, signing and dating it, submitting copies to the U.S. Fish and Wildlife Service (address listed on page 1) and the Arkansas Department of Environmental Quality, and keeping a copy for your records.

Final Statement of Basis

This Statement of Basis is for information and justification of the permit limits only. Please note that it is not enforceable. This permitting decision is for renewal of the discharge Permit Number AR0001899 with Arkansas Department of Environmental Quality (ADEQ) Facility Identification Number (AFIN) 33-00001 to discharge to Waters of the State.

1. PERMITTING AUTHORITY.

The issuing office is:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT.

The applicant's mailing address is:

Unimin Corporation - Guion Facility
P.O. Box 29
Guion, AR 72540-0029

The facility address is:

Unimin Corporation - Guion Facility
Main Street
Guion, AR 72540

3. PREPARED BY.

The permit was prepared by:

Loretta Reiber, P.E.
Staff Engineer
Permits Branch, Water Division
(501) 682-0612
E-Mail: reiber@adeq.state.ar.us

4. PERMIT ACTIVITY.

Previous Permit Effective Date:	3/1/2005
Previous Permit Expiration Date:	2/28/2010

Outfall 009: Latitude: 35° 54' 23" Longitude: 91° 55' 28"
Outfall 010: Latitude: 35° 55' 32"; Longitude: 91° 56' 11"
Outfall 011: Latitude: 35° 54' 32.5"; Longitude: 91° 56' 37.8"

The receiving waters named:

Outfall 001 - Rocky Bayou, thence to the White River
Outfall 009 - backwater slough of the White River, thence to the White River
Outfall 010 - unnamed tributary of the White River, thence to the White River
Outfall 011 - backwater slough of the White River, thence to the White River

All discharges are made in Segment 4F of the White River Basin. The receiving streams with USGS Hydrologic Unit Code (H.U.C) of 11010004 and reach #004 (of the White River) are Waters of the State classified for primary and secondary contact recreation, raw water source for domestic (public and private), industrial, and agricultural water supplies, propagation of desirable species of fish and other aquatic life, and other compatible uses.

Although the initial receiving streams all have watershed areas less than ten square miles, they have been classified for primary and secondary contact recreation due to the close proximity to the White River.

8. 303(d) LIST, ENDANGERED SPECIES, AND ANTI-DEGRADATION CONSIDERATIONS.

a. 303(d) List:

The initial receiving streams and the White River are not on the 2008 303(d) list in Segment 4F. Therefore no permit action is required.

b. Endangered Species:

No comments on the application were received from the U.S. Fish and Wildlife Service (USF&WS). The draft permit and Statement of Basis were sent to the USF&WS for their review.

c. Anti-Degradation:

The limitations and requirements set forth in this permit for discharge into waters of the State are consistent with the Antidegradation Policy and all other applicable water quality standards found in APC&EC Regulation No. 2.



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

110 S. Amity Road, Suite 300

Conway, Arkansas 72032

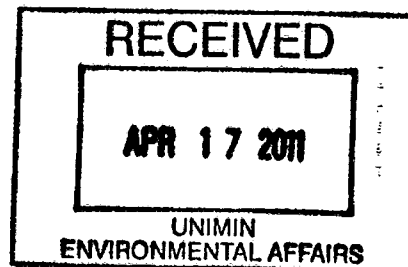
Tel.: 501/513-4470 Fax: 501/513-4480



April 22, 2011

Reference: TA0903

Donald Higgins
Unimin Corporation
4000 Baker Road
Ottawa, IL 61350



Dear Mr. Higgins:

The U.S. Fish and Wildlife Service (Service) has reviewed the information supplied in your letter dated April 11, 2011, regarding the proposed construction of a tailings pond for Guion Facility in Izard County, Arkansas. Our comments are submitted in accordance with the Endangered Species Act (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.).

The following federally listed threatened and endangered species are known to occur in this region: Missouri bladderpod (*Physaria filiformis*), Gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), and Pink mucket (*Lampsilis abrupta*). In addition the candidate species rabbitsfoot (*Quadrula cylindrica cylindrica*) is also known to occur in this region.

Sediment and/or nutrient transport from the proposed project location may have direct, indirect, and/or cumulative effects to mussels, fish hosts, and/or their habitat(s). The effects of sedimentation and nutrients (e.g., ammonia, etc.) on mussels, fish, and their habitats are well documented in the scientific literature. Adverse effects associated with sedimentation and nutrification from all phases of construction activities may be minimized and/or alleviated through proper implementation and maintenance of erosion control best management practices and maintaining vegetative buffers. Buffer width is dependent upon slope, vegetation type, and soil types. The Service can provide additional technical assistance on appropriate vegetative buffer widths upon request.

The following best management practices (BMPs) do not override other BMPs that may have been specified to use from other sources, but are in addition to those instructions.

Erosion and Sediment Control

BMPs should be implemented for all construction projects within karst landscapes. BMPs should include filter fences, straw bales, interceptor dikes and swales, sediment traps, ditch checks, detention basins, mulching, seeding, and/or revegetation as appropriate. Mats or netting should be applied on steep slopes and stream banks. Erosion and sediment control measures should be sized to handle at least the 25 year flood and 24-hour storm event. Erosion and sediment control BMP's should be implemented to prevent sediment and contaminants from entering groundwater.

It is important that construction plans reduce erosion and sedimentation into streams and karst features by:

- Identifying areas with potential for erosion problems prior to construction initiation.
- Avoiding wetlands and low lying areas.
- Restoring steep embankments with seed, mulch, fertilizer, and implementing erosion control measures such as silt fences, straw bales, matting, and sediment traps. Soil stabilization immediately after earth work is complete is critical.
- Restoring steep approaches to stream crossings by seeding, mulching, fertilizing, and implementing erosion control measures such as silt filter fences, ditch checks, straw bales, matting, and sediment traps. It is critical that restoration be implemented immediately after construction.
- On approaches to stream crossings, drainage control structures should be located at the top and base of the slope/bank. Runoff should be routed to stable slopes on either side of the right of way, or routed via temporary conveyance structures to the base of the approach slope where it can infiltrate into the stream bank and eventually seep back to the channel.

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Construction in Sensitive Areas

As the true extent of the underground environment is difficult to clearly delineate, undiscovered karst features; such as cave openings, sinkholes, and underground passages may occur on or near

a project site, even in previously developed areas. Therefore, the Service recommends the following precautionary measures be taken to avoid impacts to groundwater and sensitive or endangered species which may inhabit karst features not previously surveyed.

1. Survey existing and any new right-of-ways for karst features such as caves, sinkholes, losing streams, and springs.
2. Establish a natural area of 300 feet or greater around any cave, sinkhole, losing stream, or spring found during the survey (or during any aspect of project implementation). The Service should be contacted for further evaluation to determine if caves are used by sensitive or federally listed species.
3. If a cave is used by sensitive or federally listed species, the Service may request that the cave be mapped to determine if additional openings or passages may be affected by the project. The Service may recommend modifications of the proposed project to allow natural areas to be established. Incorporation of natural areas may be necessary to avoid impacts.
4. If caves or other openings are encountered during construction, the Service requests that work efforts cease within 300 feet of the opening. The opening should be adequately marked and protected from work activities, and the Service should be contacted immediately. No fill materials should be placed into the opening until Service or Service approved personnel have the opportunity to inventory the site.
5. The Service should assess caves located prior to or during construction for sensitive/endangered species and provide recommendations before activities proceed.
6. No blasting should be permitted in the vicinity of any known karst feature without previous consultation.

Additional measures may be required for construction near sensitive areas including stream channels and karst features. Care should be taken when working around streams and karst features to prevent unnecessary damage to or removal of vegetation. If a cave or fracture is breached or surface water is rerouted into a karst feature, all activities should cease and the Service should be contacted to assess the situation and provide further consultation before proceeding.

Staging areas should be at least 300 feet away from streams, wetlands, and karst features. All streams, wetlands, and karst features adjacent to disturbed areas should be protected by the use of silt fence, straw bales, and other BMPs necessary to prevent sediment from entering water bodies. A combination of several measures may be necessary to decrease damage at stream crossings. In streams with enough flow, temporary in-stream settling ponds should be used to catch sediment generated by construction. Sediment should be removed as soon as construction is completed. For smaller streams or where appropriate, water could be bypassed through construction areas by the use of flume pipes, pumps, or coffer dams. Stream can be bypassed using directional drilling techniques, as discussed later.

Streams and karst areas should be restored and stabilized immediately following construction activities. Native plants, mats, netting, and other BMPs should be used to stabilize banks. Instream deflectors and anchored logs should be used in high velocity streams to protect vulnerable banks and allow for reestablishment of vegetation. Riprap revetment should also be used, if necessary, to help stabilize slopes in areas of high velocity stream flows. The use of riprap should, however, be minimized. Rock typical of the local geology should be used if available. Monitoring of BMP performance in critical areas, particularly at sensitive stream crossings and stream approach slopes should be conducted and documented on a routine basis prior to and after storms during construction and operation. Based on monitoring, additional BMPs or other improvements may be necessary to insure minimization of impact.

All efforts should be made to minimize stream alterations which could impact water quality and fish and wildlife resources. Construction along streams should not take place during fish spawning seasons if possible.

Chemical Controls

Herbicides, fertilizers, vehicle maintenance fluids, petroleum products, and drilling fluids should be discarded, stored, and/or changed in staging areas established at least 300 vegetated feet from streams or karst features. Spill response protocols and kits should be maintained on site to address these concerns.

Areas where discharge material, overburden, fuel, and equipment are stored should be designed and established at least 300 vegetated feet from the edge of streams and karst features. Further distance is recommended, but with proper barrier fences, surface design, and/or maintaining a vegetated buffer, most impacts can be avoided or significantly reduced.

Stormwater

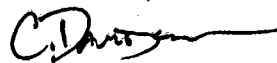
Stormwater concerns occur during construction and after the site is developed and stabilized. Threats to groundwater shift from sediment and fuel/oil/grease, to lawn chemicals, oil and grease from personal vehicles, brake dust, chip seals, roof tar, and other household contaminants. Plans should be made to address post construction stormwater contaminants.

The Arkansas Department of Environmental Quality and the Environmental Protection Agency oversee and permit stormwater runoff. In 2003, the Northwest Arkansas Regional Planning Commission developed the Northwest Arkansas Stormwater Quality Best Management Practices Preliminary Guide Manual for community use. The manual was developed with six control measures including public education and outreach, public participation and involvement, illicit discharge, detection and elimination, construction site runoff control, post-construction runoff control, pollution prevention, and good housekeeping. When open land is developed the hydrology of the site completely changes. Possible contaminants associated with development include sediment, nutrients, microbes, organic matter, toxic contaminants, trash, and debris. Each of these together or separately can pollute groundwater. Once contaminants leave the site and enter drainage within a groundwater recharge zone, whatever the water was carrying is now contributing to groundwater contamination threatens rare and endangered karst animals.

The comments herein are for the sole purpose of providing technical assistance to the action agency or for individual pre-project planning assistance. These comments and opinions should not be misconstrued as an "effect determination" or considered as concurrence with any proceeding determination(s) by the action agency in accordance with Section 7 of the ESA. These comments do not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, a finding concurrence letter, etc.) from the Service, both lethal and nonlethal "take" of protected species are in violation of the ESA.

We appreciate your interest in the conservation of endangered species. If you have any questions, please contact the Arkansas Ecological Services Staff at (501) 513-4487.

Sincerely,

A handwritten signature in dark ink, appearing to read "C. Davis" or similar, with a long horizontal flourish extending to the right.

~~For~~ Jim Boggs
Project Leader

APPENDIX D

Soils Information

STORM WATER POLLUTION PREVENTION PLAN
Unimin Corporation – Guion Plant

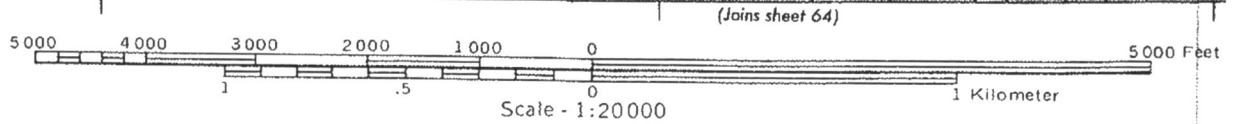
United States
Department of
Agriculture

Soil
Conservation
Service

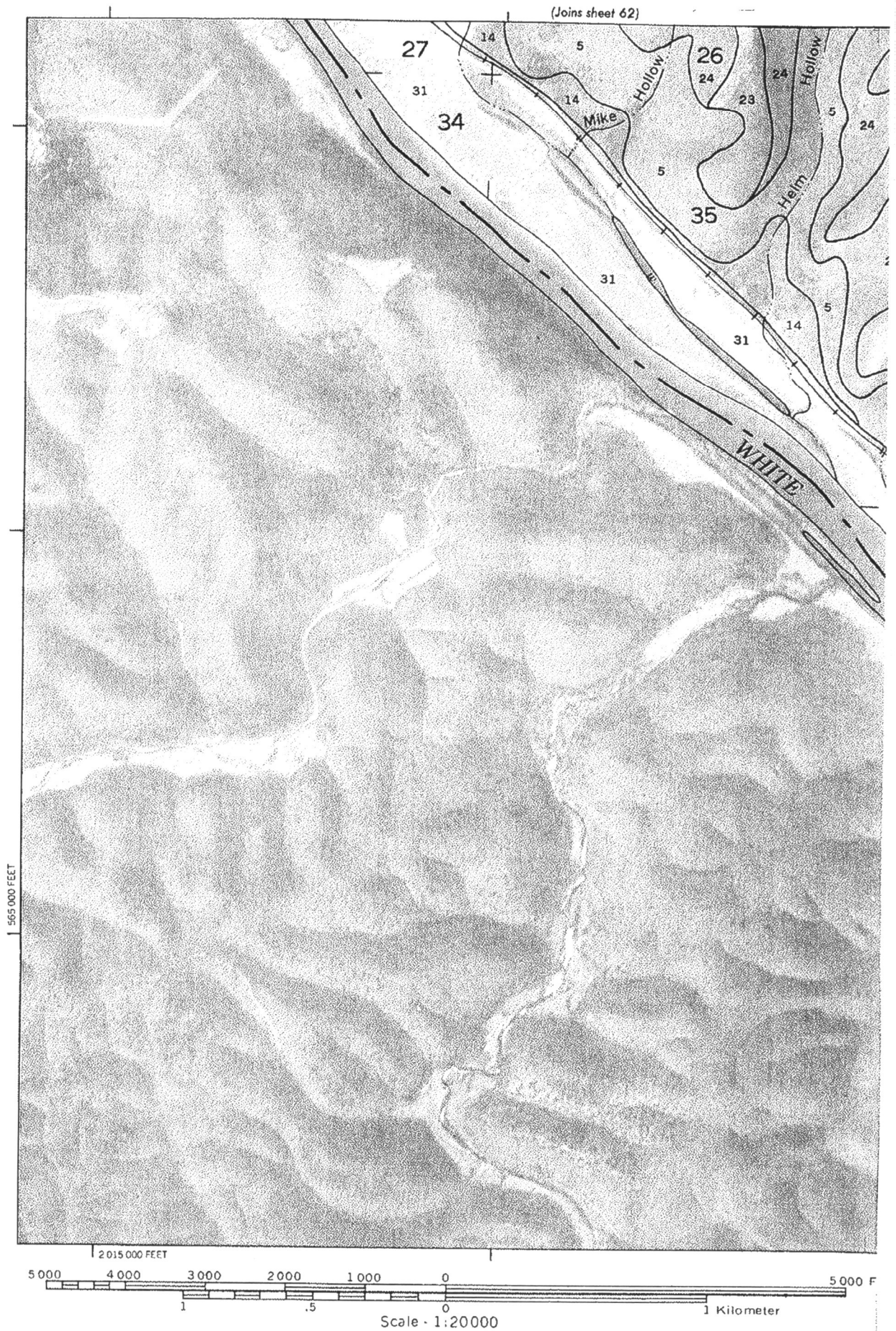
In Cooperation with
Arkansas Agricultural
Experiment Station

Soil Survey of Fulton and Izard Counties Arkansas

SHEET 62
Guion



FULTON AND IZARD COUNTIES, ARKANSAS — SHEET NUMBER 64



The soils in this complex are poorly suited to most urban uses. Shallowness to bedrock, slope, surface stones, and rock outcrops are severe limitations for dwellings, small commercial buildings, local roads and streets, and septic tank absorption fields. These limitations are difficult and generally impractical to overcome.

Ramsey soils are in capability unit VIIc-4 and in woodland suitability group 5x9.

30—Secesh and Elsayh soils, frequently flooded.

This map unit consists of deep, well drained and somewhat excessively drained, level to nearly level soils in an irregular pattern on flood plains along small streams. Individual areas of each soil are long and narrow and large enough to be mapped separately, but because of present and predicted use, the soils were mapped together. Most mapped areas consist of both soils, but a few areas consist of only one soil. The mapped areas range from about 10 to 100 acres in size. Slopes range from 0 to 3 percent.

These soils formed in alluvial sediment that washed mainly from cherty dolomite and siltstone. The soils are usually flooded two or three times each year for brief periods late in winter and early in spring.

Secesh soils are well drained. They make up about 55 percent of the map unit. Typically, the surface layer is dark brown silt loam about 8 inches thick. The subsoil is dark yellowish brown loam to a depth of about 12 inches; strong brown cherty silty clay loam to a depth of about 30 inches; yellowish red very cherty sandy clay loam to a depth of about 55 inches; and strong brown very cherty sandy clay loam to a depth of 76 inches or more.

Secesh soils are moderate in natural fertility and in content of organic matter. Permeability is moderate, and the available water capacity is medium. Reaction is medium acid or slightly acid in the surface layer and very acid to slightly acid in the subsoil. The rooting zone is deep and easily penetrated by roots.

Elsah soils are somewhat excessively drained. They make up 30 percent of this map unit. Typically, the surface layer is very dark grayish brown cherty loam about 8 inches thick. The underlying material is dark brown very cherty loam to a depth of about 28 inches, dark yellowish brown very cherty silt loam to a depth of about 40 inches, and dark brown and brown very cherty loam to a depth of about 72 inches. Bedrock is hard, level-bedded dolomite.

Elsah soils are moderate in natural fertility and in content of organic matter. Permeability is moderately rapid, and the available water capacity is low. Reaction ranges from medium acid to neutral throughout. The rooting zone is deep and easily penetrated by roots.

The remaining 15 percent of this map unit is made up of small areas of Peridge and Sturkie soils, gravel bars, and narrow overflow channels.

These soils are not suited to cultivated crops because of frequent flooding (fig. 10). In most areas, the soils

have been cleared and are used as pasture or hay meadows. These soils are well suited to use as improved pasture. Suitable pasture plants include bermudagrass, tall fescue, white clover, alfalfa, and lespedeza.

Secesh soils are moderately suited to use as woodland, and Elsayh soils are well suited. Suitable trees include black walnut, American sycamore, sweetgum, and eastern cottonwood. Secesh soils have no significant limitations to woodland use and management. Seedling mortality is a moderate limitation on Elsayh soils.

Secesh and Elsayh soils have severe limitations for most urban uses. Flooding is a severe limitation for dwellings, small commercial buildings, local roads and streets, and septic tank absorption fields. Major flood control measures are needed to overcome this limitation.

This map unit is in capability unit Vw-2; Secesh soils are in woodland suitability group 4o7, and Elsayh soils are in woodland suitability group 3f5.

31—Sturkie silt loam, occasionally flooded. This is a deep, well drained, nearly level soil on flood plains of the White River. Slopes are smooth and convex. The areas are long and narrow; most are less than 1/4 mile wide and are parallel to the river. Some areas have a series of low terraces on two or more levels. Slope is 1 to 3 percent. The individual areas range from about 40 to 200 acres in size. Some areas of this soil are protected against flooding by upstream dams.

Typically, the surface layer is very dark grayish brown silt loam about 7 inches thick. The subsurface layer is very dark grayish brown silt loam to a depth of about 28 inches. The subsoil is brown silt loam to a depth of about 46 inches; below that, it is dark brown silt loam to a depth of about 57 inches. The underlying material is dark brown silt loam to a depth of about 70 inches and brown loam to a depth of 80 inches or more.

This soil is moderate to high in natural fertility and in content of organic matter. The surface and subsurface layers range from medium acid to mildly alkaline, and the subsoil and substratum range from slightly acid to moderately alkaline. Permeability is moderate, and the available water capacity is high. The soil has good tilth and can be worked within a wide range of moisture content. The rooting zone is deep and easily penetrated by roots. Small streams that transect the areas entrench themselves very deeply in this soil and are difficult to cross with farm machinery. At intervals averaging more than 2 years, this soil is flooded for brief periods between December and April.

Included with this soil in mapping are small areas of Secesh and Peridge soils and areas of soils that have a surface layer of loam or fine sandy loam or a gravelly surface layer. Also included along intersecting tributaries are areas of soils that have slopes of more than 3 percent.

This soil is well suited to cultivated crops. Runoff is slow, and flooding is a moderate hazard. Suitable crops



Figure 10.—Secesh and Elsay soils are on narrow flood plains. Frequent flooding restricts their use to permanent pasture.

include soybeans, corn, and small grains. With good management, clean-tilled crops that leave large amounts of residue can be grown safely year after year.

Conservation measures need to be intensified as slope length and gradient increase. This soil is used mainly for hay or pasture. This soil is well suited to use as pasture. Suitable pasture plants include alfalfa, tall fescue, white clover, bermudagrass, orchardgrass, and lespedeza.

This soil is well suited to use as woodland. Suitable trees include red oak, white oak, American sycamore, eastern cottonwood, and black walnut. There are no significant limitations to woodland use and management.

This soil has severe limitations for most urban uses. Flooding is a severe limitation for dwellings, small commercial buildings, local roads and streets, and septic tank absorption fields. Some areas of this soil are protected from flooding by upstream dams. However, the possibility of flooding increases with the distance from these structures and with the number of tributaries that flow into the White River. Therefore, the hazard of

flooding increases as the White River flows eastward along the western and southern boundaries of Izard County.

This soil is in capability unit 1lw-1 and in woodland suitability group 2c4.

32—Sturkie silt loam, frequently flooded. This is a deep, well drained, nearly level soil on flood plains of larger streams. Slopes are smooth and convex. Some areas have a series of terraces on two or more levels. Slope is 1 to 3 percent. Individual areas range from about 40 to 200 acres in size.

Typically, the surface layer is very dark grayish brown silt loam about 7 inches thick. The subsurface layer is very dark grayish brown silt loam to a depth of about 28 inches. The subsoil is brown silt loam to a depth of about 46 inches and dark brown silt loam to a depth of about 57 inches. The underlying material is dark brown silt loam to a depth of about 70 inches and brown loam to a depth of 80 inches or more.

TABLE 17.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydro-logic group	Flooding			High water table			Bedrock		Risk of corrosion	
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hard-ness	Uncoated steel	Concrete
					<u>Ft</u>			<u>In</u>			
31----- Sturkie	B	Occasional	Brief-----	Dec-Apr	>6.0	---	---	>60	---	Low-----	Low.
32----- Sturkie	B	Frequent-----	Brief-----	Dec-Apr	>6.0	---	---	>60	---	Low-----	Low.
33----- Wideman	A	Frequent-----	Very brief	Mar-May	>6.0	---	---	>60	---	Low-----	Low.

* See description of the map unit for composition and behavior characteristics of the map unit.

APPENDIX E

Weekly Inspection Form

STORM WATER POLLUTION PREVENTION PLAN
Unimin Corporation – Guion Plant

**STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM**

INSPECTOR: _____ DATE: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL _____

AREA	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED (YES/NO)	STAB. WITH	CONDITIO N

STABILIZATION REQUIRED:

SILT FENCE

IS THE BOTTOM OF THE FABRIC STILL BURIED? _____

IS THE FABRIC TORN OR SAGGING? _____

ARE THE POSTS TIPPED OVER? _____

HOW DEEP IS THE SEDIMENT? _____

MAINTENANCE REQUIRED FOR SILT FENCE: _____

SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN? _____

CONDITION OF BASIN SIDE SLOPES? _____

ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT? _____

CONDITION OF OUTFALL FROM SEDIMENT BASIN? _____

MAINTENANCE REQUIRED FOR SEDIMENT BASIN: _____

CONSTRUCTION EXIT

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD? _____

IS THE GRAVEL CLEAN OR FILLED WITH SEDIMENT? _____

DOES ALL TRAFFIC USE THE STABILIZED EXIT TO LEAVE THE JOB SITE? _____

IS THE CULVERT BENEATH THE EXIT WORKING? _____

MAINTENANCE REQUIRED FOR CONSTRUCTION EXIT: _____

CHANGES TO BE PERFORMED BY: _____ ON OR BEFORE: _____

CHANGES REQUIRED TO THE STORMWATER POLLUTION PREVENTION PLAN:

REASONS FOR CHANGES:

"I certify under penalty of law that this document was prepared under my direction or supervision. 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."

Signature

Date

For additional information, please use a separate page.

STORM WATER POLLUTION PREVENTION PLAN
Unimin Corporation – Guion Plant

APPENDIX F

Plan Certification Form

STORM WATER POLLUTION PREVENTION PLAN
Unimin Corporation – Guion Plant

PLAN 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 for fine and imprisonment for knowing violations."

Printed Name: Michael R. Maloney

Printed Title: Plant Manager

Signature: Michael R Maloney

Date: 3/25/2011

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ARKANSAS DEQ
WATER DIVISION
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N LITTLE ROCK AR 72118

2 LBS

1 OF 1

AR 722 9-21



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NORTH LITTLE ROCK AR 72118-5317

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Storm Water Pollution Prevention Plan (SWPPP) Completeness Checklist

Permittee: Unimin Corporation
Project Name: Cuion Pond T
Project City: Guion

Tracking Number: ARR15 3588
Location of SWPPP on-site: Guion Plant Office

Yes = Complete

No = Incomplete/Deficient

N/A = Not Applicable to project

Yes No N/A

Notes

A. A site description, including:

X			1. Pre-construction topographic view	Part II.A.4.A.1
X			2. Nature of activity and intended use after NOT is filed	Part II.A.4.A.2
X			3. Sequence of major activities	Part II.A.4.A.3
X			4. Total area of site/Disturbed area.	Part II.A.4.A.4
X			5. The runoff coefficient of the site after construction is complete.	Part II.A.4.A.5
X			6. Existing soil or storm water data.	Part II.A.4.A.5

X			B. Responsible Parties: All parties dealing with the SWPPP and the areas they are responsible for on-site.	Part II.A.4.B
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X			C. Receiving Waters: Site to ultimate waters	Part II.A.4.C
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D. Documentation of permit eligibility related to Impaired Water Bodies and Total Maximum Daily Loads (TMDLs).

		X	1. Are pollutants listed on the 303(d) list or in the TMDLs for the receiving waters addressed in SWPPP?	Part II.A.4.D.1
X			2. Have pollutants directly related to the site been addressed?	Part II.A.4.D.2-
X			3. Measures taken to reduce pollutants from the site.	Part II.A.4.D.3

X			E. Documentation of attainment of Water Quality Standards after authorization.	Part II.A.4.E
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X			F. Endangered Species information.	Part II.A.4.F
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G. Site Map showing:

X			1. Drainage patterns.	Part II.A.4.G.1
X			2. Approximate slopes after major grading.	Part II.A.4.G.1
X			3. Area of soil disturbance.	Part II.A.4.G.2
X			4. Outline of areas which will not be disturbed.	Part II.A.4.G.2
X			5. Location of major structural and non-structural controls.	Part II.A.4.G.3
X			6. Location of main construction entrance and exit.	Part II.A.4.G.4
X			7. Areas where stabilization practices are expected to occur.	Part II.A.4.G.5
X			8. Locations of off-site materials, waste, borrow area or storage area.	Part II.A.4.G.6
		X	9. Locations of areas used for concrete wash-out.	Part II.A.4.G.7
X			10. Surface waters.	Part II.A.4.G.8
X			11. Locations where water is discharged to a surface water or MS4.	Part II.A.4.G.9
X			12. Storm water discharge locations.	Part II.A.4.G.10
X			13.Areas where final stabilization has been accomplished.	Part II.A.4.G.11

H. Description of Controls:

			1. Erosion and sediment controls, including:	
X			a. Initial disturbed areas.	Part II.A.4.H.1.a
X			b. Erosion and Sediment controls to retain sediment on-site.	Part II.A.4.H.1.b
X			c. Replacement of inadequate controls.	Part II.A.4.H.1.c
X			d. Removal of off-site accumulations.	Part II.A.4.H.1.d
		X	e. Maintenance of sediment traps/basins @ 50% capacity.	Part II.A.4.H.1.e
X			f. Litter, construction debris and chemicals properly handled.	Part II.A.4.H.1.f
X			g. Off-site storage areas and controls.	Part II.A.4.H.1.g

Storm Water Pollution Prevention Plan (SWPPP) Completeness Checklist

Permittee: Unimin Corporation
Project Name: Cuion Pond T
Project City: Guion

Tracking Number: ARR15 3588
Location of SWPPP on-site: Guion Plant Office

Yes = Complete

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2. Stabilization practices.

<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Description and schedule for stabilization.	<u>Part II.A.4.H.2.a</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Description of buffer areas.	<u>Part II.A.4.H.2.b</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Records of stabilization.	<u>Part II.A.4.H.2.c</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Deadlines for stabilization.	<u>Part II.A.4.H.2.d</u>

3. Structural Practices.

<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Sediment basins	<u>Part II.A.4.H.3.a.1</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are more than 10 acres draining to a common point? If so, are sediment basins included? If not, skip to item 3.b.	<u>Part II.A.4.H.3.a.1</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sediment basin dimensions and capacity description and calculations.	<u>Part II.A.4.H.3.a.1</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sediment basin outfall type, size, capacity, etc. calculations.	<u>Part II.A.4.H.3.a.1</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	If a basin wasn't practicable, are other controls sufficient?	<u>Part II.A.4.H.3.a.1</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Velocity dissipation devices to provide non-erosive flow conditions from the discharge point along the length of any outfall channel.	<u>Part II.A.4.H.3.b</u>

I. Other controls including:

<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Waste disposal practices which prevent discharge of solid materials to waters of the State.	<u>Part II.A.4.I.1</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Measures to minimize offsite tracking of sediments by construction vehicles.	<u>Part II.A.4.I.2</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Measures to ensure compliance with State or local waste disposal, sanitary sewer, or septic system regulations.	<u>Part II.A.4.I.4</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Does the site have a concrete washout area controls?	<u>Part II.A.4.I.5</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Does the site have fuel storage areas, hazardous waste storage and/or truck wash areas controls?	<u>Part II.A.4.I.6</u>

<input checked="" type="checkbox"/>	<input type="checkbox"/>	J. Identification of allowable non-storm water discharges	<u>Part II.A.4.J</u>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	K. Post construction stormwater management.	<u>Part II.A.4.K</u>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	L. State or local requirements incorporated into the plan.	<u>Part II.A.4.L</u>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Are inspection procedures identified in the plan?	
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Frequency listed?	<u>Part II.A.4.M.1</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Inspection form	<u>Part II.A.4.M.2</u>

<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ours.	
<input type="checkbox"/>	<input type="checkbox"/>	If not ours, does it contain the following items:	

<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Inspector name and title	<u>Part II.A.4.M.2.a</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Date of inspection.	<u>Part II.A.4.M.2.b</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Amount of rainfall and days since last rain event (Part II.A.4.M	<u>Part II.A.4.M.2.c</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. BMPs used on-site	<u>Part II.A.4.M.2.d</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. If BMPs are in working order and if maintenance is needed (Scheduled and completed)	<u>Part II.A.4.M.2.e</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Location and dates when major construction activities begin, occur or cease	<u>Part II.A.4.M.2.f</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Report signature of inspector	<u>Part II.A.4.M.2.g</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Inspection Records	<u>Part II.A.4.M.3</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Winter Conditions	<u>Part II.A.4.M.4</u>

<input checked="" type="checkbox"/>	<input type="checkbox"/>	N. Maintenance procedures for control measures identified in the SWPPP.	<u>Part II.A.4.N</u>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	K. Signed Plan certification.	<u>Part II.A.7. and Part II.B.10</u>
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