

Overview of Current Financial Responsibility Challenges in North Carolina

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Bonding Requirements in NC

- A suitable reclamation bond must be posted for a proposed mine site prior to issuance of a mining permit
- Intended to assure final reclamation of the site, should the operator refuse or be unable to complete the task
- Costs range from \$500 - \$5,000 per acre

- We have worked with the Attorney General (AG)'s office to craft suitable language for the different acceptable options
- The State must be given 60 days written notice prior to cancellation of any bond to allow time for the operator to reinstate or replace the bond, or for us to collect on the bond

SCHEDULE OF RECLAMATION COSTS
(Based upon range of \$500 - \$5,000 per affected acre)

COMMODITY CODES: SG = Sand and/or Gravel, GS = Gemstone, Borrow = Borrow/fill dirt, CS = Crushed Stone, DS = Dimension Stone, FS = Feldspar, MI = Mica, LI = Lithium, PF = Pyrophyllite, OL = Olivine, KY = Kyanite/Sillimanite/Andalusite, PH = Phosphate, CL = Clay/Shale, PE = Peat, AU = Gold, TI = Titanium, and OT = Other

Type	T/S Ponds	Spiles	W.piles	P.area/H.R.	Mine Excav.
SG, GS, Borrow	\$500/ac.(L) 1500(FI)	\$1800/ac.	\$2000/ac.	\$1800/ac.	\$500/ac.(L) \$2000(PD)
CS, DS, FS, MI, LI, PF, OL, KY	500(L) 1500(FI)	1800	2000	2000	500(L) 2500(PD)
PH	1000(L) 2500(FI)	2500	5000	5000	2000(L) 5000(PD)
CL	1000(L) 2500(FI)	2500	5000	5000	2000(L) 3700(PD)
PE, AU, TI, OT	1000(L) 2500(FI)	2500	3000	3500	2000(L) 5000(PD)

(L) = reclamation to a lake and revegetating sideslopes

(FI) = reclamation by filling in and revegetating

(PD) = reclamation by grading for positive drainage & revegetating

E. DETERMINATION OF AFFECTED ACREAGE AND BOND

The following bond calculation worksheet is to be used to establish an appropriate bond (based upon a range of \$500 to \$5,000 per affected acre) for each permitted mine site based upon the acreage approved by the Department to be affected during the life of the mining permit. Please insert the approximate acreage, for each aspect of the mining operation, that you intend to affect during the life of this mining permit (in addition, please insert the appropriate reclamation cost/acre for each category from the Schedule of Reclamation Costs provided with this application form) OR you can defer to the Department to calculate your bond for you based upon your maps and standard reclamation costs:

CATEGORY	AFFECTED ACREAGE		RECLAMATION COST/ACRE*		RECLAMATION COST
Tailings/Sediment Ponds:	_____ Ac.	X	\$ _____/Ac.	=	\$ _____
Stockpiles:	_____ Ac.	X	\$ _____/Ac.	=	\$ _____
Wastepiles:	_____ Ac.	X	\$ _____/Ac.	=	\$ _____
Processing Area/Haul Roads:	_____ Ac.	X	\$ _____/Ac.	=	\$ _____
Mine Excavation:	_____ Ac.	X	\$ _____/Ac.	=	\$ _____
Other:	_____ Ac.	X	\$ _____/Ac.	=	\$ _____
TOTAL AFFECTED AC.:	_____ Ac.				
(TOTAL PERMITTED AC.:	_____ Ac.)				

Temporary & Permanent Sedimentation & Erosion Control Measures:

Divide the **TOTAL AFFECTED AC.** above into the following two categories: a) affected acres that drain into proposed/existing excavation and/or b) affected acres that will be graded for positive drainage where measures will be needed to prevent offsite sedimentation and sedimentation to onsite watercourses and wetlands.

a) Internal Drainage _____ Ac.

b) Positive Drainage _____ Ac. X \$1,500.00 = \$ _____

SUBTOTAL COST: \$ _____

Inflation Factor:

0.02 X SUBTOTAL COST: \$ _____ X Permit Life (1 to 10 years): _____

INFLATION COST: \$ _____

TOTAL COST = SUBTOTAL COST + INFLATION COST = \$ _____

Total Reclamation Bond Cost: \$ _____ (round down to the nearest \$100.00)
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Blanket Bonds

- If calculated bond is $> \$500,000.00$ or the operator has multiple sites whose required bonds total $> \$500,000.00$, the operator may choose to post a blanket bond
- $\$500,000.00$ cap for blanket bond

Note: Operator must be in good standing to post a blanket bond

Martin Marietta Aggregates Belgrade Quarry example of Blanket Bond

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Google earth

Imagery Date: 12/31/2011 1993

34°52'42.94" N 77°12'56.92" W elev 0 ft

Eye alt 2415 ft

Reclamation Bond Options

- Surety Bond
 - Issued by a surety/insurance company licensed to do business in NC
 - Must include power of attorney
 - Must use the language on our surety bond form (approved by the Attorney General's Office)

Reclamation Bond Options

- Surety Bond
- Irrevocable Standby Letter of Credit
 - Typically issued by a bank
 - MUST include an auto renewal clause
 - Must use the language on our letter of credit form (approved by the AG's office)

Reclamation Bond Options

- Surety Bond
- Irrevocable Standby Letter of Credit
- **Assignment of Savings Account**
 - Issued by a bank licensed to do business in NC
 - Must have photocopy of the savings instrument (passbook, deposit slip, CD, etc.) which shows the name on the account, the account number, the date, the amount of money in the account being assigned to us
 - Must use our form (language approved by the AG's office)
 - Many permittees are using this option, which allows them to put up their own money, as they face more stringent lending requirements from banks and surety companies

Reclamation Bond Options

- Surety Bond
- Irrevocable Standby Letter of Credit
- Assignment of Savings Account
- Cash
 - We can accept cash, but don't recommend it
 - Require a certified check/money order (otherwise we must wait to be sure the check clears the bank)
 - Takes longer to return the money to the permittee once the site is reclaimed

Bond Forfeiture Process

Should a surety wish to cancel an operator's bond, the State must be given written notice at least 60 days prior to the cancellation date

Upon receiving a bond cancellation notice:

- Central office staff emails/faxes a copy of the cancellation notice to the Regional office
 - Regional Office staff inspect all sites affected by the cancellation within 7 calendar days of receipt, noting all work that must be done to reclaim the site(s)
- Central office staff sends a certified cancellation letter with deadline for reinstatement/replacement of said bond and informs the operator of the consequences of bond forfeiture
 - If the bond is not reinstated or replaced within 30 days of the cancellation date, a bond forfeiture request is made to the Attorney General's Office
 - The Attorney General's Office will collect on the bond prior to the cancellation date (unless a the bond is reinstated/replaced)
 - If an operator has a bond forfeited, then he may not permit another mine site

Reclamation Contract Process

- NC uses an online contract processing system (IBEAM) in order to prepare contract background documents
- There are 2 categories of contracts we can use for reclamation of mine sites:
 - If < \$2,500, then three companies may be contacted directly and asked for estimates of the work. Staff may choose the preferred contractor (with justification) and a contract for the work, including a payment schedule, may be drafted and signed.
 - If > \$2,500, then a request for bids must be placed online, a prebid conference must be held, and there is a much more lengthy process, the end result of which is that a contract is ultimately issued for the work to be done.

Challenges

- A major difficulty has been in prioritizing the work to be done onsite with the limited funds obtained through bond forfeiture. If the work to be done is anticipated to cost more than the funds collected, then the scope of work for the project must be scaled back prior to the bid process.
- If a prebid conference is held, and all bids come in over the total monies forfeited, then the entire process must start over. (The scope of work must be revised, there must also be another request for bids, another prebid conference, etc.)

Brief Case Studies

Coy Otha Jones Mine

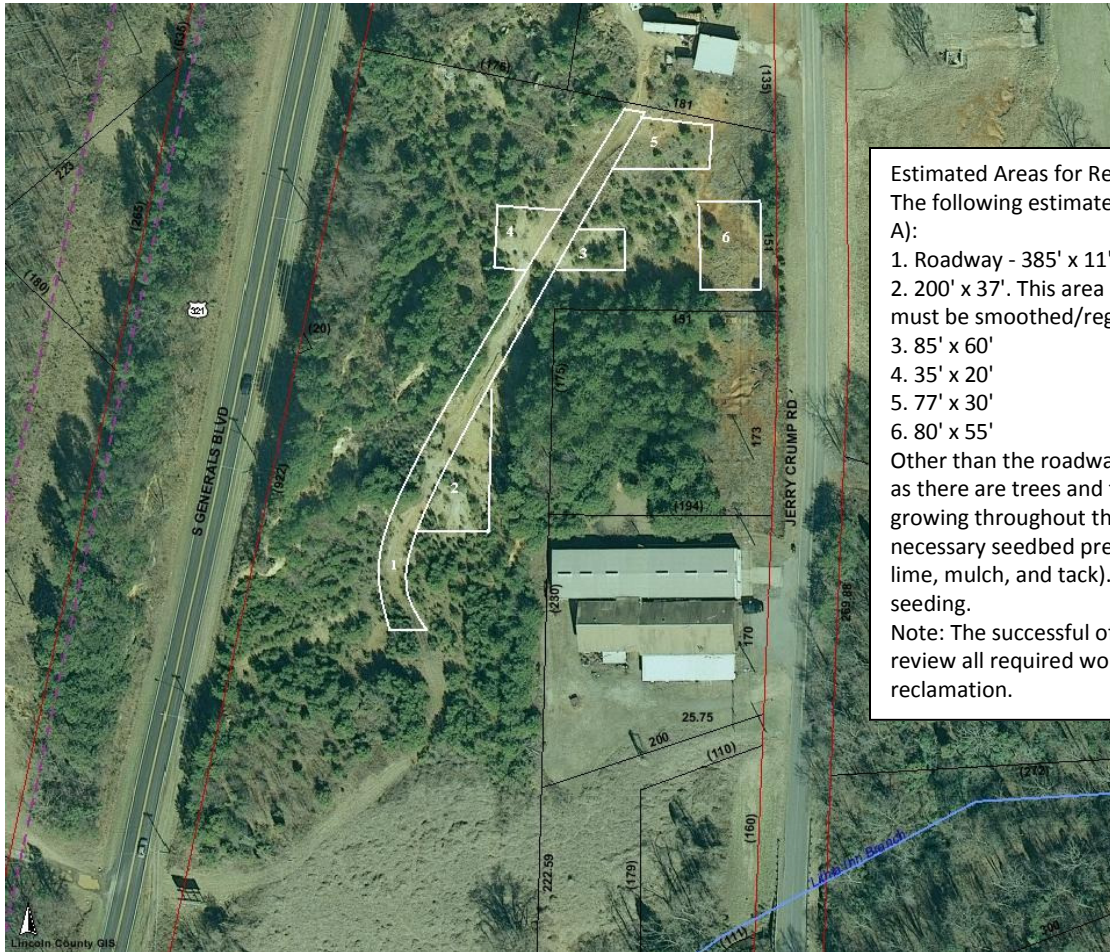
- Sand Pit in Lincoln County (Piedmont NC)
- Total permitted and bonded acreage: 2.0 ac
- Total bond collected: \$2,000.00

- Permit issued September 22, 1990
- Expiration date: September 22, 2000

Reclamation Contract

- Site visits were conducted to determine the extent of reclamation to be done
 - More than 2 acres had been affected, but most had been reclaimed by the operator and/or nature
 - There were some areas which had been mined on all sides, resulting in a steep knob. These areas were not deemed safety hazards and were now heavily vegetated and covered with dense trees.
 - All land was still owned by Mr. Coy Otha Jones.
 - With limited funds, the focus was to repair a gully and provide groundcover for bare areas along the road and entrance area.
- Since < \$2,500 was available for the work, a prebid conference was not necessary
 - 3 local contractors were contacted via email and provided with a written scope of work and request for estimate
 - Only one response was received – the bid was \$2,150 (\$150 more than the bond money collected for this site)
 - It was decided to proceed with reclamation, so the Land Quality Section provided the additional \$150 from unclaimed/unreturnable previously forfeited bond funds

Areas Identified for Reclamation



Estimated Areas for Reclamation

The following estimates are provided for the areas shown on the map (Attachment A):

1. Roadway - 385' x 11'
2. 200' x 37'. This area also has a gully which has begun to erode. The gully area must be smoothed/regraded.
3. 85' x 60'
4. 35' x 20'
5. 77' x 30'
6. 80' x 55'

Other than the roadway, all the other areas are approximate in the measurements as there are trees and thin volunteer vegetation growing throughout the bare areas. Areas 1 through 6 must be seeded (including necessary seedbed preparation, seed, fertilizer, lime, mulch, and tack). Area 2 must also have the gully smoothed/regraded prior to seeding.

Note: The successful offeror shall be afforded the opportunity to meet onsite to review all required work prior to the initiation of reclamation.

Coy Otha Jones Mine Reclamation

Before:



After: April 24, 2012



Fred Sawyer Mine

- Sand Pit in Pasquotank County (Coastal NC)
- Total permitted and bonded acreage: 5.24 ac
- Total bond posted: \$8,500.00

- Permit issued July 31, 1995
- Renewed October 29, 2001
- Expiration date: October 29, 2011



Fred Sawyer Mine - January 2008

The operator/permittee of the site died on January 1, 2008, leaving the site unreclaimed. We received notice of cancellation and had to forfeit a Letter of Credit and an Assignment of Savings Account which had been posted for the site.

Reclamation Priorities



After Mr. Sawyer's death, the current landowner used the site for a motocross area for his son. Once motocross activities ceased, the site began to reclaim naturally. With the limited funds, our top priority was to remove various waste and debris which had been deposited around much of the pond's perimeter, then regrade and revegetate these banks.

Bid Process

- The cost of this project would be well over \$2,500 so the more lengthy bid request process was necessary.
- A scope of work was developed and the bid document was placed online.
- A prebid conference was held for any prospective bidders (anyone who wishes to have a bid considered MUST be in attendance at the conference)
 - Questions are only allowed at the pre-bid conference. Once the conference is concluded, staff are no longer allowed to communicate with prospective bidders. All communications must then be through the Office of Purchasing & Services

Contract Bids

\$8,500.00 Available

Company	Total Bid	Amount Over
A	\$ 43,042.20	\$ 34,542.20
B	\$ 60,575.00	\$ 52,075.00
C	\$ 37,540.00	\$ 29,040.00
D	\$ 18,829.00	\$ 10,329.00

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Note that even the lowest bid was more than 2x the amount of money we had available to reclaim the site!

Contract Bids

\$8,500.00 Available

Company	Total Bid	Amount Over
A	\$ 43,042.20	\$ 34,542.20
B	\$ 60,575.00	\$ 52,075.00
C	\$ 37,540.00	\$ 29,040.00
D	\$ 18,829.00	\$ 10,329.00

The highest bid was
just over 5x the amount of money we had
available to reclaim the site!

Reclamation and Release

In this case, the vast majority of the site had been reclaimed naturally.

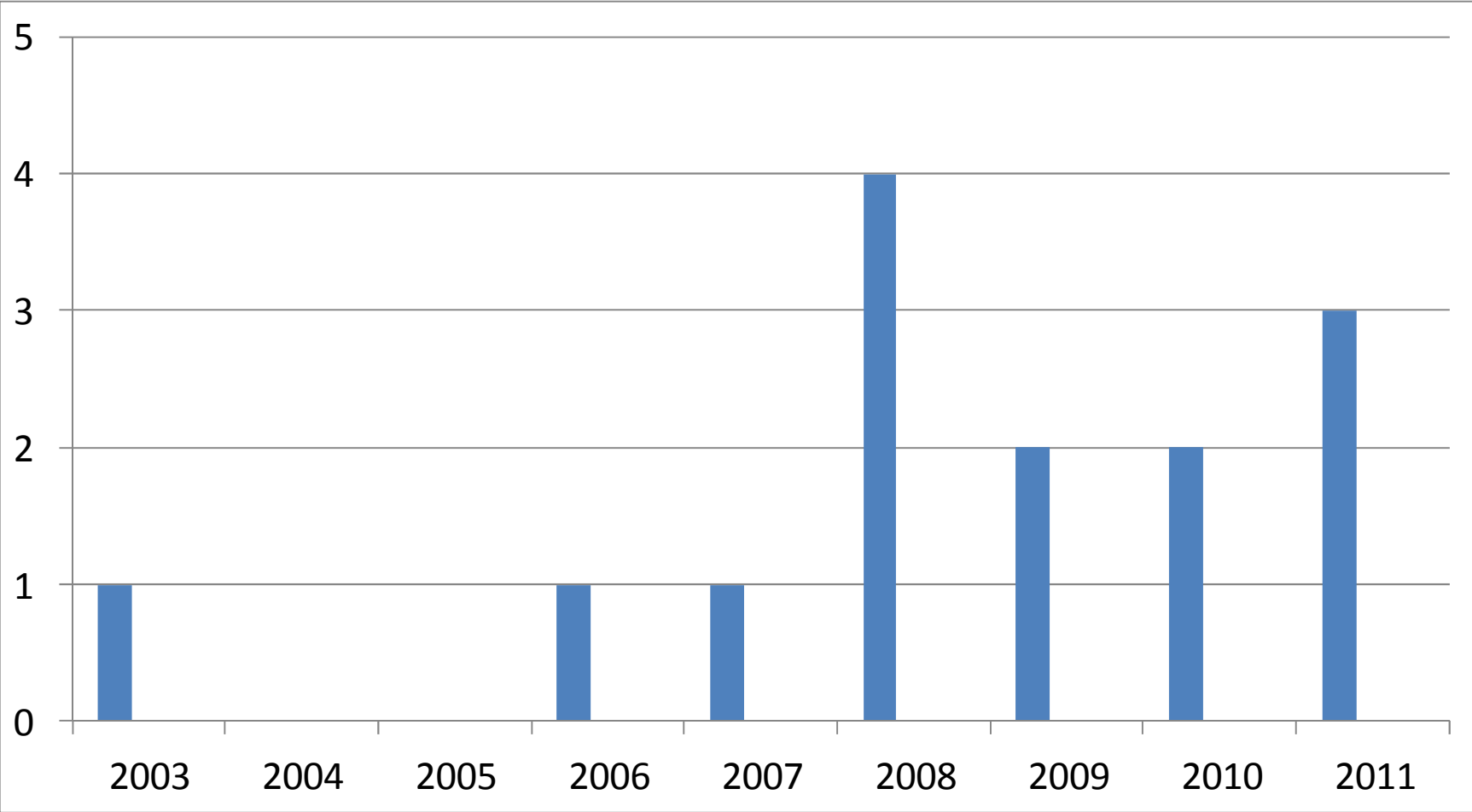
Unfortunately, the top priority (removal of the off-site generated waste/refuse and resloping and seeding of those bank areas) proved cost-prohibitive with the amount of bond available.

The current landowner, however, was satisfied with the site and signed a written statement accepting the reclamation of the former Fred Sawyer Mine.

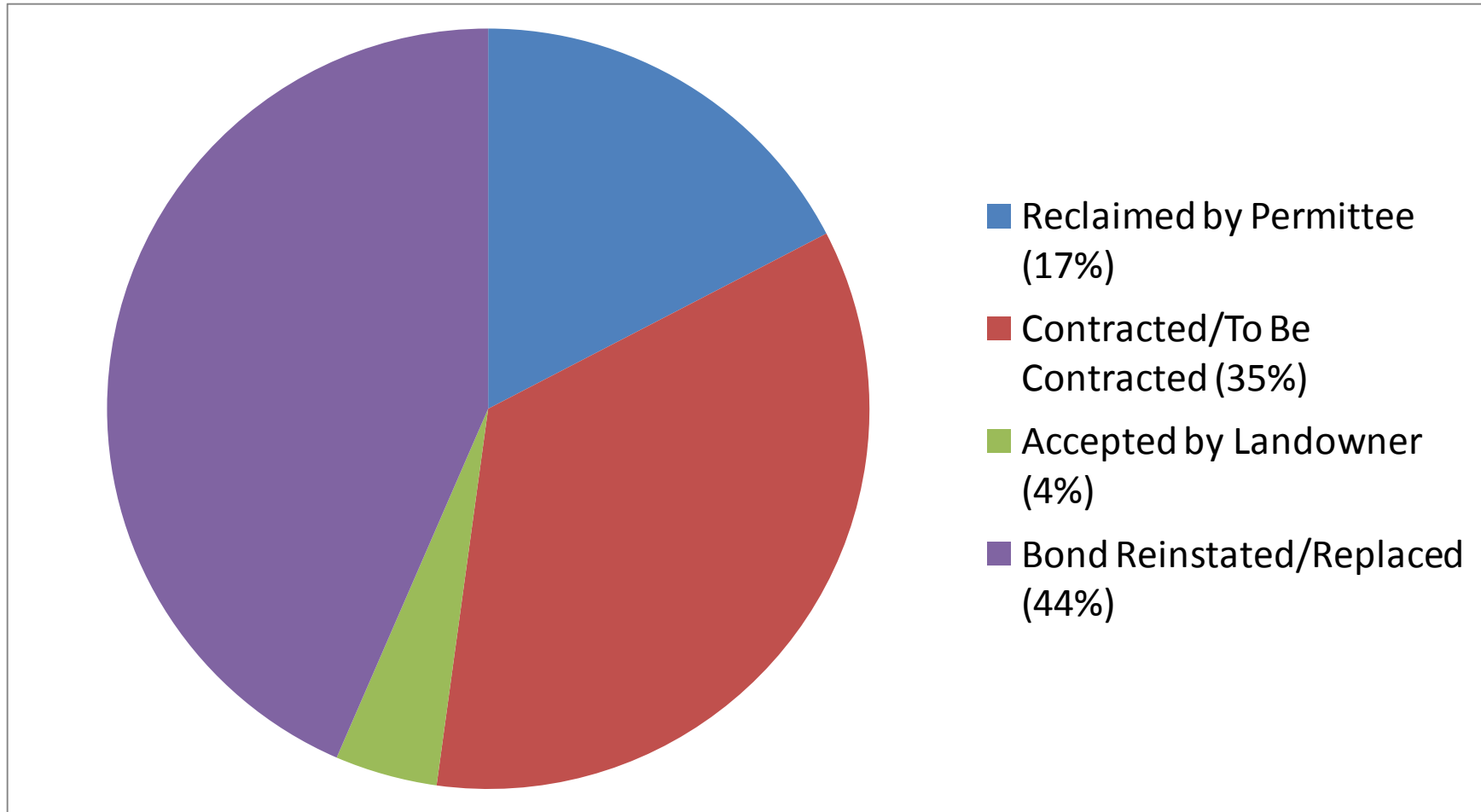
*Note that in this case, the major reclamation cost was not accounted for in our bond calculation – the disposal of off-site generated waste was not a permitted activity.



Number of Recent Bond Forfeitures (Actually Collected)



Total Bond Forfeiture Requests To the AG's Office Over the Past 5 Years



Reclamation Preferences

- Voluntary Reclamation by permittee
- Repermitting of the site (by another operator, who would post sufficient reclamation bond and accept responsibility for the site)
- Bond Forfeiture
 - Occasionally, forfeiture of the bond will motivate a permittee to reclaim the site in order to have the bond money returned
 - Alternatively, the state can contract for reclamation of the site.

Issues We Are Facing

- Our schedule of reclamation costs does not appear adequate
- We are seeing greater numbers of forfeitures, which increases workloads on central and regional office staff
- How to prioritize reclamation work with limited funds
 - Safety, sensitive areas (wetlands), bare areas/slopes, aesthetics....
- Landowner expectations

MINE FORFEITURE SITES TO BE RECLAIMED IN NORTH CAROLINA

Gurkin Sand Mine
Approx. 5.8 acres
affected
12.66 acres
bonded. \$9200.00
in the budget to
reclaim the site.



There may not be enough bond to reclaim
to standards

MINE FORFEITURE SITES TO BE RECLAIMED IN NORTH CAROLINA



Deerwater One Mine, area affected approx. 28.3 acres, Bonded area amount for reclamation \$27,000.00. Rental Cat D-8 dozer \$1895/day or \$5500/week operator not included. Mobilization cost ???

MINE FORFEITURE SITES TO BE RECLAIMED IN NORTH CAROLINA



Gainey Pit, 60 acres bonded, \$36,000 Bond. The average cost to seed and mulch a site could average \$1500 per acre not including re-soiling material. If the entire area is seeded and mulched (60 acres) could cost \$90,000.00. half of that 30 ac \$45,000

