- DURING THE STOCKPILING OF SOIL FOR THE RP-1-5 AREAS, THE DEPTH REQUIREMENT FOR RECLAMATION COVERAGE WAS 48". THIS WORK WAS DONE PRIOR TO 2003 AS OUR AERIAL ORTHOPHOTO AND CONTOURS FROM THAT YEAR SHOW THE SOIL STOCKPILES IN PLACE, RP-1 WAS RECLAIMED, AND RP-2-5 WERE ACTIVELY RECEIVING REFUSE.

NARRATIVE:

AT SOME POINT, IT WAS DETERMINED THE TOPSOIL IS NOT SIGNIFICANTLY BETTER THAN THE SUBSOIL AND IS INFESTED WITH INVASIVE CHEATGRASS. DURING RECLAMATION, THE TOPSOIL WAS DESIGNATED TO BE PLACED FIRST WITH THE SUBSOIL PLACED ON TOP. THE TOTAL DEPTH REQUIREMENT WAS ALSO REDUCED TO 30". THIS REDUCTION IN RECLAMATION DEPTH MEANT THERE WAS EXCESS MATERIAL IN THE SOIL STOCKPILES.

THE DEVELOPMENT OF THE RP-A AREA COINCIDED WITH AN UNEXPECTED CHANGE IN COAL PROCESSING WASTE MOISTURE CONTENT. COAL WASTE SLURRY FROM THE BOTTOM OF THE CLARIFIER USED TO BE DISCHARGED INTO THE OLD SEALED D SEAM MINE. THAT DISPOSAL AVENUE UNEXPECTEDLY ENDED AND THE HIGH MOISTURE MATERIAL HAD TO BE ROUTED TO THE REFUSE PILES. THE HIGH MOISTURE MATERIAL HAS TO BE SPREAD OUT AND DRIED BEFORE IT CAN BE PROPERLY COMPACTED.

DURING THE WINTER, THE HIGH MOISTURE MATERIAL PRESENTS A UNIQUE PROBLEM. PROPER COMPACTION CANNOT HAPPEN DURING FREEZING TEMPERATURES. FURTHERMORE, THE WET MATERIAL DOES NOT DRY OUT UNTIL LATE SPRING. THE WET MATERIAL CANNOT BE STOCKPILED BECAUSE IT SPREADS OUT. RATHER THAN ONE LARGE STOCKPILE, THE WET MATERIAL IS BEST HANDLED BY PLACING IT IN SPACED OUT ROWS UNTIL SPRING WHEN THE ROWS CAN BE PUSHED, DRIED OUT, AND COMPACTED. THIS REQUIRES A SIGNIFICANT AMOUNT OF SURFACE AREA.

FORTUNATELY, RP-A HAD BEEN APPROVED JUST BEFORE THIS NEW AREA-INTENSIVE WASTE HANDLING PROCESS BECAME NECESSARY. KNOWING THERE WAS EXTRA STOCKPILED SOIL AVAILABLE, THE AMOUNT OF TOPSOIL AND SUBSOIL REMOVED FROM RP-A WAS REDUCED IN ORDER TO SPEED DEVELOPMENT AND MAKE MUCH NEEDED STOCKPILING AND DRYING AREA AVAILABLE AS QUICKLY AS POSSIBLE. ALSO, THE ACTUAL AMOUNT OF TOPSOIL EXCAVATED WAS DEEMED LESS IMPORTANT AS IT IS PLACED BELOW THE SUBSOIL UPON RECLAMATION.

THE PURPOSE OF THIS MAP IS TO DOCUMENT THE STOCKPILED SOIL VOLUMES AND REQUIREMENTS. OLD STOCKPILE VOLUMES WERE TABULATED BEFORE 2003, BUT CLOSER INSPECTION REVEALED INCONSISTENCIES AND NO EVIDENCE OF HOW THOSE VOLUMES HAD BEEN CALCULATED COULD BE LOCATED. RATHER THAN RELYING ON SUSPECT VOLUME TABULATIONS, THE ORIGINAL EXISTING GROUND CONTOURS FROM A 1979 AERIAL SURVEY WERE DIGITIZED AND ADJUSTED FOR DATUM DISCREPANCIES. ACCURATE VOLUMES FOR THE STOCKPILES FROM RP1-5 WERE THEN CALCULATED.

COMBINING RP 2-3,4, AND 5 WILL REQUIRE ADDITIONAL STOCKPILING TO COVER AN ADDITIONAL 5.83 ACRES. ADDITIONALLY, THE EXCESS FROM THE OLD STOCKPILES ALONG WITH THE COMPLETED STOCKPILE VOLUMES FROM THE RP-A AREA ARE 2.5 ACRE FEET SHORT. THE TOTAL ADDITIONAL VOLUME TO BE STOCKPILED IS 17.07 ACRE-FEET. THIS VOLUME WILL PRIMARILY COME FROM THE AREA BETWEEN RP-234 AND RP-5. BECAUSE THIS AREA HAS SOME ROCKY KNOLLS, IT MAY BE MORE COST EFFECTIVE TO PUSH SOME OF THE REFUSE OFF THE UPPER AREAS OF RP-A AND TAKE MORE SUBSOIL FROM THERE. SOIL TAKEN FROM FROM RP-A WILL BE STOCKPILED IN PILES 10 AND 11 SHOWN HEREON WITHOUT A NEED TO INCREASE DISTURBED AREA. SOIL TAKEN FROM BETWEEN RP-234 AND 5 WILL BE PLACED ON PILES 6 AND 7 SHOWN HEREON ALSO WITHOUT INCREASING THE DISTURBED AREA FOR THE STOCKPILES.

> RP-A 95.70 DISTURBED ACRES

10 **TOPSOIL** RPA 30.1 ACRE-FEET

SUBSOIL RPA 56,7 ACRE-FEET

