

# SWANA Annual Conference

## 2008

D u a n e L . P e n n e y , I n c .

1 0 K e y P o i n t s t o C o n d u c t a L a n d f i l l E v a l u a t i o n

# **10 Key Points to Conduct a Landfill Evaluation**

**Sanitary landfills are complex and require technical and operational expertise to maintain a balance of compliance, economics and safety. It may be a good idea to conduct a complete evaluation of your landfill. The following is a checklist that will help you begin the process of developing your landfill evaluation.**

# **KEY POINT #1**

## **PERMITS AND REGULATIONS**

- REVIEW OF ALL LANDFILL MONITORING AND OPERATIONAL PERMITS
- EVALUATE COMPLIANCE WITH ALL PERMIT REQUIREMENTS AND REPORTING DEADLINES
- EVALUATE MONITORING REQUIREMENTS FOR REGULATORY UPDATES AND POSSIBLE VARIANCES
- RECORD KEEPING AND DOCUMENTATION OF PERTINENT INFORMATION
- ORGANIZED AND WORKING FILE SYSTEM

# **KEY Point #2**

## **CUSTOMER CONTROL AT THE GATE**

- REQUIRED SIGNAGE IN PLACE
- SCALES CALIBRATED AND CERTIFIED
- CHARGING BY THE TON OR YARD
- TICKETS BEING ISSUED FOR DOCUMENTATION AND TRACKING
- GATE KEEPER TRAINED ON PROCESS AND PROCEDURES
- REQUIRED INFORMATION SIGNS IN PLACE
- TARE WEIGHT PROGRAM IN PLACE FOR VEHICLES

# **KEY POINT #3**

## **ACCESS FOR CUSTOMERS**

- ROADS GRADED , SMOOTH AND SAFE FOR VEHICULAR TRAFFIC
- ROADS ALL WEATHER SURFACE FOR INCLEMENT WEATHER
- ROADS MAINTAINED AND SLOPED FOR RUNOFF WITH FUNCTIONAL DITCHES
- DIRECTIONAL SIGNS IN PLACE
- SPEED LIMITS SIGNS IN PLACE
- LITTER PICKED UP AND CONTROLLED

# **KEY POINT #4**

## **WORKING FACE ORGANIZATION AND SAFETY**

- KEEPING VEHICLES WITH DUMP BEDS THAT RAISE AWAY FROM OTHER VEHICLES
- TRUCKS MAINTAIN A SAFE DISTANCE FROM CARS AND PICK-UPS
- KEEP HEAVY EQUIPMENT A SAFE DISTANCE FROM VEHICLES
- TIPPING AREA LEVEL
- FOLLOWING OPERATIONS PLAN FOR DAILY ACTIVE AREA
- OPERATORS TRAINED IN HAZARDOUS WASTE IDENTIFICATION

# **KEY POINT #5**

## **HEAVY EQUIPMENT UTILIZATION, APPLICATION, PROCUREMENT AND MAINTENANCE**

- HAVING THE RIGHT EQUIPMENT FOR THE JOB
- EMPLOYEES TRAINED AND CERTIFIED TO OPERATE HEAVY EQUIPMENT
- KNOWING THE PRODUCTION AND CAPABILITIES OF THE EQUIPMENT
- DAILY EQUIPMENT INSPECTION FORM
- REPAIRS AND SERVICES COMPLETED AND DOCUMENTED, ACCORDING TO SPECIFICATIONS
- PROCESS USED FOR MAJOR REPAIRS OR TO PURCHASE AND EVALUATE REPLACEMENT EQUIPMENT
- MAINTENANCE PROGRAM IN PLACE AND BEING FOLLOWED

# **KEY POINT #6**

## **COMPACTION**

- COMPACTION EQUIPMENT EVALUATION
- MAXIMIZING YOUR AIRSPACE
- COMPACTORS AND DOZERS AT THE WORKING FACE
- MEASURING YOUR COMPACTION
- ANNUAL FLYOVER OR PHYSICAL SURVEY
- LEVEL OF STANDARD
- COMPACTION EQUIPMENT METHODS

# **KEY POINT #7**

## **FILL SEQUENCE**

- ACCESS AND ROADS TO NEW CELL
- THREE TO FIVE YEAR PLAN FOR FILL SEQUENCE
- CONTIGUOUS CELLS
- MAXIMIZING VEHICLE TRAFFIC FOR COMPACTION
- PLAN YOUR FILL SEQUENCE WITH EXCAVATION PLAN
- SCHEDULING INTERMEDIATE COVER OR FINAL COVER WITH CELL EXCAVATION

# **KEY POINT #8**

## **EXCAVATION PLAN**

- SOIL BALANCE FOR THE LIFE OF THE SITE
- TRACKING USAGE OF SOIL
- TYPES OF SOIL FOR LINER OR COVER (CLAY VERSUS OTHER TYPES OF MATERIALS)
- EQUIPMENT USED TO HAUL AND APPLY SOIL FOR DAILY COVER
- EXCAVATION PLAN AND FILL SEQUENCE PLAN
- DISTANCE, METHOD AND COSTS TO EXCAVATE AND HAUL SOIL

# **KEY POINT #9**

## **METHOD TO APPLY DAILY COVER**

- ALTERNATIVE DAILY COVER
- SPRAY ON APPLICATION
- USE DOZER TO SPREAD SOIL FOR DAILY COVER
- SCRAPER TO HAUL AND DUMP
- HAUL TRUCKS AND TRACK HOE
- TRACK AIRSPACE CONSUMPTION WITH COVER MATERIALS

# **KEY POINT #10**

## **CELL CONSTRUCTION AND LANDFILL COVER**

- PLAN THE CELL CONSTRUCTION WITH THE FINAL COVER TOGETHER IF POSSIBLE TO SAVE MOVING THE SOIL TWICE
- KEEP CLAY AREAS SEPARATE FOR FUTURE CLAY LINER
- COMPETITIVELY BID CONTRACTOR SERVICES
- PLAN DESIGN AND APPROVALS WELL IN ADVANCE OF CONSTRUCTION SEASON
- PROTECT YOUR WORK FROM WEATHER
- CELL CONSTRUCTION AND EXCAVATION
- COSTS PER ACRE FOR CELL CONSTRUCTION AND FINAL COVER