

CONSTRUCTION STORMWATER SWPPP FOR TEXAS AGGREGATES RECYCLING FACILITY

[Click Here to Contact a Compliance Professional Today](#)

PROJECT OVERVIEW

[Conroe, Texas](#)

ESE supported a Texas aggregates and recycling facility in Conroe with construction stormwater compliance planning for site preparation and operational buildout. The approximately 13-acre project included vegetation removal, hard surface installation, driveway improvements, utility installation, a truck scale, and stormwater retention infrastructure. The engagement focused on TPDES Construction General Permit compliance, erosion control planning, and defensible SWPPP documentation.

CHALLENGES

The project disturbed more than five acres, triggering large construction activity requirements under TPDES General Permit TXR150000 and TCEQ oversight. Site soils presented elevated erosion potential, with high rainfall erosivity, mixed hydrologic soil groups, and drainage toward a nearby receiving water. Construction support activities, aggregate storage, waste handling, dust control, and multiple contractor scopes required clear responsibilities and consistent BMP implementation.

ESE'S APPROACH

ESE developed a site-specific SWPPP aligned with the Clean Water Act, TCEQ requirements, and the TPDES Construction General Permit. The plan integrated soil data, drainage patterns, potential pollutant sources, endangered species and cultural resource considerations, inspection procedures, and corrective action documentation. ESE structured the SWPPP to support field implementation, regulatory review, and ongoing updates as site conditions changed.

KEY ELEMENTS IMPLEMENTED

- Developed a TPDES-compliant SWPPP for large construction activity coverage
- Identified pollutant sources from aggregate stockpiles, equipment, waste areas, and sanitary facilities
- Specified erosion, sediment, perimeter, stabilization, and velocity dissipation controls
- Incorporated inspection schedules, corrective action logs, spill logs, and training records
- Evaluated receiving waters, impaired waters status, MS4 applicability, ESA, and cultural resources
- Defined operator and subcontractor responsibilities for shared SWPPP compliance

RESULTS

The completed SWPPP provided a compliance-ready framework for managing construction stormwater discharges during site development. Documented BMPs, inspection forms, spill procedures, and revision logs improved accountability across contractors and reduced the risk of sediment, TSS, oils, grease, metals, and waste-related impacts. The plan also supported timely permit authorization, site notice posting, and recordkeeping requirements.

PROJECT IMPACT

The project gave the aggregates facility a practical stormwater compliance system that could be implemented in the field and defended during agency review. By linking regulatory requirements to site-specific controls and documentation, ESE helped reduce construction-phase environmental risk while supporting long-term operational readiness. The SWPPP also established a foundation for future updates as the facility transitions from construction to active aggregate recycling operations.