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Drafting Effective Contracts for SWM Projects

Strategic and Technical Information

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1. Introduction

Developing a successful contract from a technical standpoint requires:

- ☐ Careful planning – feasibility study,
- ☐ A good government contract team,
- ☐ Selection of competent, responsive contractor,
- ☐ The contract is only as good as its preparation, and
- ☐ Having good technical information is essential.



2. Project Team

2.1. Project Sponsor

2.1.1. Members

- ☰ Purchasing Agent – material selection, quality assurance;
- ☰ Project Manager – technically proficient, well versed in design and construction;
- ☰ Finance Specialist – funding;
- ☰ Legal agent – enabling laws, contracts & disputes.



2. Project Team

2.1. Project Sponsor

2.1.2. Responsibilities

- ☐ Financial resources;
- ☐ Information regarding requirements for the PROJECT, including information regarding the Project sponsor's objectives, schedule, constraints and criteria.





2. Project Team

2.2. Technical Consultant

2.2.1. Members

- ☐ Project Manager – experienced and influential;
- ☐ Project Engineer/Architect – licensed, certified, experienced;
- ☐ Technical expert – technology review.



2. Project Team

2.2. Technical Consultant

2.2.2. Technical Consultant Selection/Qualification

A competent consultant has:

- ☐ Project experience – multiple comparable projects,
- ☐ Agreed to similar contracts – get samples,
- ☐ Good reputation – do reference checks,
- ☐ Has the academic background,
- ☐ Has the necessary accreditations,
- ☐ Good project team – working interface.



2. Project Team

2.3. Contractor

2.3.1. Members

- ☐ Project Manager - licensed, certified, experienced;
- ☐ Project Engineer/Architect - licensed, certified, experienced;
- ☐ Financial agent – payments and financial assessment;
- ☐ Tradesmen – skilled, trade certifications.



2. Project Team

2.3. Contractor

2.3.2. Contractor Selection/Qualification

A competent contractor has:

- ☰ Project experience – multiple comparable projects,
- ☰ Agreed to similar contracts – get samples,
- ☰ Good reputation – do reference checks,
- ☰ Financial resources – credit report,
- ☰ Good project team – working interface.



3. **Contract Particulars**

- ☐ Addresses services and performance levels,
- ☐ Easy for non attorney to understand,
- ☐ Indexed,
- ☐ Referenced.



3. Contract Particulars

3.1. Public Involvement

- ☐ Good public image,
- ☐ Generator complains to contractor first.



3. Contract Particulars

3.2. Record keeping

- ☐ Accessible to the Project Team
- ☐ Generator complaints,
- ☐ Monitoring records,
- ☐ Weigh data,
- ☐ Standard/automated format for analysis,
- ☐ Graphical reporting where practical.





3. Contract Particulars

3.3. Collaborative enforcement

- ☐ Contaminated wastes,
- ☐ Illegal dumping,
- ☐ Recyclables poaching.



3. Contract Particulars

3.4. Economic

- ☰ Favor local businesses and zone locators,
- ☰ Hire local personnel,
- ☰ Training/certification programs,
- ☰ Purchase local products,
- ☰ Affirmative action – hiring/training.



4. Service Requirements

- ☐ Dependent upon feasibility study,
- ☐ Use complete statements,
- ☐ Represent expectations,
- ☐ Define minimum standards,
- ☐ Allow a reasonable exception/substitution process,
- ☐ Establish reasonable approval authority.



5. Performance Standards

- ☐ Part of contract,
- ☐ Measurable,
- ☐ Observation,
- ☐ Computation,
- ☐ Documentation,
- ☐ Reasonable,
- ☐ Published international standard,
- ☐ Basis for penalty/reward.





6. Ownership Options

Examples:

- ☐ Private ownership,
- ☐ Cooperative,
- ☐ Joint venture,
- ☐ BOT.



7. Liability

**Solid waste management can be hazardous.
It is essential that responsibility be assigned for:**

- ☐ Damages – property, environmental,
- ☐ Injury – and death,
- ☐ Non-performance,
- ☐ Insurance coverage,
- ☐ Injury, death, fire, explosion, disease, chemicals,



7. **Liability** (continued)

- ☰ Sources – medical, industrial, home,
- ☰ Machinery – movements and processes,
- ☰ Frequency – of interactions,
- ☰ Process selection,
- ☰ Health and safety certification.



8. Compensation

- ☰ Amount – affordable to the community,
- ☰ Rate – commensurate with services delivered/value based
- ☰ Amendment process – with changed scope,
- ☰ Withholding,
- ☰ Allowances for inflation, deflation,
- ☰ Decreased – if standards are not met,
- ☰ Increased – if standards are exceeded.





9. Construction Risks

The construction risks can be broadly grouped under the following categories:

9.1. Technical Risks

- ≡ Incomplete design;
- ≡ Inadequate site investigation;
- ≡ Uncertainty over the source and availability of materials;
- ≡ Appropriateness of specifications.



9. Construction Risks

9.2. Logistical Risks

- ☰ Availability of resources - particularly construction equipments, spare parts, fuel and labor.
- ☰ Availability of sufficient transportation facilities.

9.3. Construction Risks

- ☰ Uncertain productivity of resources.
- ☰ Weather and seasonal implications.
- ☰ Industrial relations problems.



9. Construction Risks

9.4. Financial Risks

- ☐ Inflation.
- ☐ Availability and fluctuation in foreign exchange.
- ☐ Delay in Payment.
- ☐ Repatriation of funds.
- ☐ Local taxes.



9. Construction Risks

9.5. Political Risks

- ☐ Constraints on the availability and employment of expatriate staff.
- ☐ Customs and import restrictions and procedures.
- ☐ Difficulties in disposing of plant and equipment.
- ☐ Insistence on use of local firms and agents.

The allocation of construction risks between the parties to a contract must be clearly identified to reduce the probability of disputes to a minimum and ensure construction management success.



10. Time Factors/Limits

- ☰ Services delivery,
- ☰ Payment to contractor,
- ☰ Changes to contract and services.



11. Dispute Resolution

- ≡ Goal – easy and fair,
- ≡ Mediation/arbitration/court,
- ≡ Alternative dispute resolution (ADR),
- ≡ Prescribed in contract,
- ≡ Uses third parties/administrative process agreeable to both parties,
- ≡ Minimizes contests and court proceedings,
- ≡ Minimizes arbitrary actions.



12. Summary

Qualities of an effective contract

- ☐ Is straightforward to administer,
- ☐ Allows change when necessary,
- ☐ Rewards good performance,
- ☐ Penalizes poor performance,
- ☐ Is balanced between contractor and the project sponsor.

