

Revenue Recognition Case Study

CONSTRUCTION INDUSTRY

SCENARIO:

General Contractor Company (GCC) agrees to a contract with Customer A to construct a manufacturing facility on Customer A's land for \$10,000,000. Under the contract GCC is contracted to both design the building and construct the building. GCC expects there to be frequent alterations to the design as construction progresses. The contract allows for GCC to bill as work progresses on the contract. The contract is a long-term contract that GCC anticipates to take three years to finish.

At the end of year one of the contract, GCC had costs to date of \$2,265,000, with total estimated costs of \$8,200,000, and they had billed \$2,000,000 of their potential billings.

STEP ONE - IDENTIFY THE CONTRACT WITH A CUSTOMER

GCC has a contract with Customer A to construct a facility on Customer A's land.

STEP TWO - IDENTIFY PERFORMANCE OBLIGATIONS IN THE CONTRACT

Since GCC anticipates frequent alterations to the design of the building as construction progresses the contract is treated as a single performance obligation (design and construct and not distinct performance obligations).

If Customer A could take the design and cancel the contract once design was complete, the contract would have two performance obligations. If the contract was for multiple buildings or multiple locations, that may also increase the number of performance obligations.

STEP THREE - DETERMINE THE TRANSACTION PRICE

\$10,000,000

If the contract included a performance bonus for finishing the construction before a certain date (or a penalty for not having it done) this would affect the transaction price and the remaining steps (see retail example).

STEP FOUR - ALLOCATION OF TRANSACTION PRICE

With only one performance obligation, no allocation needed.



STEP FIVE - RECOGNIZE REVENUE

Revenue is generally recognized upon the satisfaction of performance obligations, typically occurring when control of the good or service is transferred to the customer. Per the new standard control can be transferred at a point in time or overtime.

To be considered over time one of the following criteria needs to be met:

- The customer receives and consumes the benefits provided by the seller's performance as the seller performs (service)
- The seller's performance creates/enhances an asset that the customer controls as the asset is created/enhanced
- The seller's performance does not create an asset with an alternative use to the seller, and the entity has an enforceable right to payment for the performance completed to date

In this scenario, since Customer A owns the land GCC accounts for the contract over time. As a result GCC needs to determine the most appropriate method to measure the progress towards satisfying the performance obligation (output method or input method). Most will use the input method based on costs incurred (very similar to percentage of completion).

In the past a percentage of completion or WIP schedule would be as follows:

| Project number | Contract Price | Amount Billed to Date | Costs to Date | Estimated Costs to Complete | Total Estimated Costs | % Comp. | Estimated Gross Profit | Costs and Estimated Earnings > Billings on Un-completed Contracts | Billings > Costs and Estimated Earnings on Un-completed Contracts | Gross Profit % |
|----------------|----------------|-----------------------|---------------|-----------------------------|-----------------------|---------|------------------------|---|---|----------------|
| 1000 | \$10,000,000 | \$2,000,000 | \$2,265,000 | \$5,935,000 | \$8,200,000 | 27.6 | \$1,800,000 | \$762,195 | \$ - | 18 |

And the corresponding entry would be:

| | | |
|-----------------------------------|------------|------------|
| Cost in excess of billings | \$762, 195 | |
| Revenue | | \$762, 195 |

If GCC hadn't actually billed the client it would not have been considered a receivable and it would stay in costs in excess of billings or under billings.

Now under the new standard the WIP schedule would be as follows under three separate conditions:

1. At the end of the period, the engineer's paperwork calls for total billings to date of \$2,500,000 (customer and GCC approve this level of work has been completed), however GCC has actual billings to the customer of only \$2,000,000.

| Project number | Contract Price | Amount Billed to Date | Costs to Date | Estimated Costs to Complete | Total Estimated Costs | % Comp. | Estimated Gross Profit | Contract Asset (Liability) | Unconditional Receivable |
|----------------|----------------|-----------------------|---------------|-----------------------------|-----------------------|---------|------------------------|----------------------------|--------------------------|
| | | | | | | | | | Thus Accounts Receivable |
| 1000 | \$10,000,000 | \$2,000,000 | \$2,265,000 | \$5,935,000 | \$8,200,000 | 27.6 | \$1,800,000 | \$262,195 | \$ 500,000 |

And the corresponding entry would be:

| | | |
|----------------------------|---------|---------|
| Accounts Receivable | 500,000 | |
| Contract Asset | 262,195 | |
| Revenue | | 762,195 |

Even though GCC hasn't actually billed the additional \$500,000 the engineer calculation calls for, GCC has the unconditional right to collection (only the passage of time delays the receipt) and thus it is considered an Accounts Receivable. Under this example the remaining amount would be considered a Contract Asset, as the WIP calculation was for an amount greater than the unconditional receivable.

2. At the end of the period, the engineer's paperwork calls for total billings to date of \$3,000,000 (customer and GCC approve this level of work has been completed), however GCC has actual billings to the customer of only \$2,000,000.

| Project number | Contract Price | Amount Billed to Date | Costs to Date | Estimated Costs to Complete | Total Estimated Costs | % Comp. | Estimated Gross Profit | Contract Asset (Liability) | Unconditional Receivable |
|----------------|----------------|-----------------------|---------------|-----------------------------|-----------------------|---------|------------------------|----------------------------|--------------------------|
| | | | | | | | | | Thus Accounts Receivable |
| 1000 | \$10,000,000 | \$2,000,000 | \$2,265,000 | \$5,935,000 | \$8,200,000 | 27.6 | \$1,800,000 | \$237,805 | \$ 1,000,000 |

And the corresponding entry would be:

| | | |
|----------------------------|-----------|---------|
| Accounts Receivable | 1,000,000 | |
| Contract Asset | | 237,805 |
| Revenue | | 762,195 |

Even though GCC hasn't actually billed the additional \$1,000,000 the engineer calculation calls for, GCC has the unconditional right to collection (only the passage of time delays the receipt) and thus it is considered an Accounts Receivable. Under this example the remaining amount would be considered a Contract Liability, as the WIP calculation was for an amount less than the unconditional receivable.

3. The engineer's paperwork calls for total billings to date of \$2,500,000, however GCC has actual billings to the customer of only \$2,000,000, additionally the contract has retention. Retention may or may not be unconditional. If GCC has to perform a final test or provide some service before being able to receive the retention the receivable is no longer unconditional. In this example we assume a 5% retention that will not be owed until final walkthrough and acceptance

| Project number | Contract Price | Amount Billed to Date | Costs to Date | Estimated Costs to Complete | Total Estimated Costs | % Comp. | Estimated Gross Profit | Contract Asset (Liability) | Unconditional Receivable |
|----------------|----------------|-----------------------|---------------|-----------------------------|-----------------------|---------|------------------------|----------------------------|--------------------------|
| | | | | | | | | | Thus Accounts Receivable |
| 1000 | \$10,000,000 | \$2,000,000 | \$2,265,000 | \$5,935,000 | \$8,200,000 | 27.6 | \$1,800,000 | \$287,195 | \$ 475,000 |

And the corresponding entry would be:

| | | |
|----------------------------|---------|---------|
| Accounts Receivable | 475,000 | |
| Contract Asset | 287,195 | |
| Revenue | | 762,195 |

This example has the same circumstances as example 1, with the exception of retention. Retention was calculated based on the engineer's billings ($\$2,500,000 \times .05 = \$25,000$) for total retention of \$25,000. GCC would not have an unconditional right to this retention amount until after the final walkthrough and acceptance, therefore it is removed from the Accounts Receivable amount and increases the Contract Asset



YEAR 2 (CONTRACT MODIFICATION)

During Year 2 of the contract, the customer determines that a separate storage facility is needed at the location. The contract was modified to include the construction of the storage facility, which is to be completed within three months of completion of the manufacturing facility, for a new total contract price of \$11,000,000. GCC determines that the construction of the separate storage facility is a distinct performance obligation and that it will transfer control of each facility as work progresses. GCC is able to bill the additional \$1,000,000 as work progresses on the storage facility.

At the end of year two of the contract, GCC had costs to date of \$6,900,000, billings of \$8,205,000, and total estimated costs of \$9,020,000. The following portions were related to the storage facility, costs of \$125,000, billings of \$205,000, and total estimated costs of \$820,000.

GCC determines that they would normally charge \$1,000,000 to construct a similar storage facility. As a result, the contract modification for the additional storage facility is accounted for as a separate contract that does not affect the accounting for the existing contract.

If the change order was accounted for under the old standard:

| Project number | Contract Price | Amount Billed to Date | Costs to Date | Estimated Costs to Complete | Total Estimated Costs | % Comp. | Estimated Gross Profit | Costs and Estimated Earnings > Billings on Un-completed Contracts | Billings > Costs and Estimated Earnings on Un-completed Contracts | Gross Profit % |
|----------------|----------------|-----------------------|---------------|-----------------------------|-----------------------|---------|------------------------|---|---|----------------|
| 1000 | \$11,000,000 | \$8,205,000 | \$6,900,000 | \$2,120,000 | \$9,020,000 | 76.5 | \$1,980,000 | \$209,634 | \$ - | 18 |

The entry at the end of Year 2 would have been:

| | | |
|-----------------------------------|---------|---------|
| Cost in Excess of Billings | 209,634 | |
| Contract Asset | | 209,634 |

Now under the new standard the WIP schedule would be as follows:

At the end of the period, the engineer's paperwork calls for total billings to date of \$8,355,000, \$8,150,000 related to the original building, and \$205,000 related to the storage facility. GCC has actual billings to the customer of \$8,000,000 for the building and \$205,000 for the storage facility.

| Project number | Contract Price | Amount Billed to Date | Costs to Date | Estimated Costs to Complete | Total Estimated Costs | % Comp. | Estimated Gross Profit | Contract Asset (Liability) | Unconditional Receivable |
|----------------|----------------|-----------------------|---------------|-----------------------------|-----------------------|---------|------------------------|----------------------------|--------------------------|
| | | | | | | | | | Thus Accounts Receivable |
| 1000 | \$10,000,000 | \$8,000,000 | \$6,775,000 | \$1,425,000 | \$8,200,000 | 82.6 | \$1,800,000 | \$112,195 | \$150,000 |
| 1001 | \$1,000,000 | \$205,000 | \$125,000 | \$695,000 | \$820,000 | 15.2 | \$180,000 | \$ (52,561) | \$ - |

The entry at the end of Year 2 would have been:

| | | |
|----------------------------|---------|---------|
| Accounts Receivable | 150,000 | |
| Contract Asset | 112,195 | |
| Contract Liability | | 52,561 |
| Revenue | | 209,634 |

If GCC determines the typical price of the storage facility would have been \$1,500,000 and therefore the \$1,000,000 does not reflect the standalone selling price, the additional \$1,000,000 would be added to the previous contract as a change order. Under this example, the total estimated costs related to the storage facility were increased to \$1,230,000 (calculated based on 18% gross profit) as the costs would be based on the standalone selling price. Billings fall under the same situation as the above example.

| Project number | Contract Price | Amount Billed to Date | Costs to Date | Estimated Costs to Complete | Total Estimated Costs | % Comp. | Estimated Gross Profit | Contract Asset (Liability) | Unconditional Receivable |
|----------------|----------------|-----------------------|---------------|-----------------------------|-----------------------|---------|------------------------|----------------------------|--------------------------|
| | | | | | | | | | Thus Accounts Receivable |
| 1000 | \$11,000,000 | \$8,205,000 | \$6,900,000 | \$2,530,000 | \$9,460,000 | 73.2 | \$1,570,000 | \$ (306,220) | \$150,000 |

The entry at the end of Year 2 would have been:

| | | |
|----------------------------|---------|---------|
| Accounts Receivable | 150,000 | |
| Contract Liability | | 306,220 |
| Revenue | 156,220 | |

ORDINARY CHANGE ORDERS

For typical smaller change orders, such as an upgrade in the style of lighting, there is not a separate distinct performance obligation and therefore the change order would be accounted for under the same single project and performance obligation and would increase the contract price, costs, etc. It would be accounted for in the same way under both the old revenue standard and the new revenue standard.

DO YOU UNDERSTAND THE IMPACT OF THE NEW ACCOUNTING STANDARD ON YOUR CONSTRUCTION COMPANY?

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