



## DI WATER QUALITY SPECIFICATIONS AND FEES

The following specifications define Expansa's internal final rinse and quality control release testing for DI pods and customer-owned ion exchange resin. Testing is completed after regeneration and final rinsing, before a pod or customer-owned resin batch or package is approved for release. The test performed depends on the resin type, as shown in Section 1.1.

All conductivity measurements referenced herein are temperature compensated to 25°C unless otherwise noted.

Expansa utilizes high purity rinse-in water during final preparation, rinsing, and quality verification activities. Standard rinse-in water quality is greater than 17.5 MΩ-cm resistivity before final release testing.

### 1. WATER QUALITY SPECIFICATIONS

#### **1.1 Internal Release Testing by Resin Type**

The specifications below are Expansa's internal final rinse and release criteria. Testing is performed at the outlet of each pod or on the applicable customer-owned resin batch or package after regeneration and final rinsing, before release for shipment or service. These internal release results do not constitute a guarantee of water quality after installation or during field operation.

| Resin Type | Internal Release Tests                    | Release Specification                                                                                                                                                                                                                  |
|------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cation     | Conductivity                              | Conductivity $\leq 10.0 \mu\text{S/cm}$ at 25°C after completion of the applicable rinse procedure and stabilization of the outlet reading                                                                                             |
| Anion      | Conductivity; Silica (as $\text{SiO}_2$ ) | Conductivity $\leq 10.0 \mu\text{S/cm}$ at 25°C after completion of the applicable rinse procedure and stabilization of the outlet reading; Silica $\leq 5 \text{ ppb}$ using Expansa's standard rinse-water and analytical conditions |
| Mixed Bed  | Conductivity; Silica (as $\text{SiO}_2$ ) | Conductivity $\leq 0.1 \mu\text{S/cm}$ at 25°C; Silica $\leq 5 \text{ ppb}$                                                                                                                                                            |

Cation and anion release results are final-rinse quality-control criteria used to confirm completion of Expansa's regeneration and rinsing procedures. These results do not establish resin capacity or guarantee removal of any particular contaminant under customer operating conditions.

#### **1.2 Mobile DI Trailer Water Quality Specifications**

A mobile DI trailer is made up of multiple DI pods arranged in one or more treatment trains. Depending on the service configuration, a trailer may include cation, anion, and mixed bed pods. Each pod assigned to a trailer is individually tested against the applicable resin-type release criteria in Section 1.1 before the trailer is released.

Water quality during operation may vary depending on feedwater conditions, flow rate, atmospheric exposure, stagnant conditions, customer piping configuration, and sample handling practices.

#### **1.3 Portable DI Pod Water Quality Specifications**

*Each portable DI pod is tested against the applicable resin-type release criteria in Section 1.1 before release.*

DI pod performance during operation may vary depending on flow conditions, plumbing configuration, stagnant water conditions, customer handling practices, and exposure to atmosphere during operation or storage.

#### **1.4 Customer-Owned Resin Regeneration Specifications**

*Customer-owned resin is tested against the applicable resin-type release criteria in Section 1.1 after regeneration and final rinsing, before the batch or package is released.*

The customer acknowledges that resin performance is dependent upon numerous factors outside Expansa's control, including but not limited to resin age and condition, prior fouling, organic contamination, iron fouling, oxidant exposure, hydraulic damage, resin separation efficiency, cross-contamination from prior service, and customer operating practices.

Accordingly, Expansa does not guarantee restoration of original manufacturer resin capacity or performance.

Expansa shall not be responsible for resin loss, reduced operating capacity, pressure drop increases, or water quality degradation associated with pre-existing resin degradation, excessive resin fines, oxidant exposure, hydraulic damage, thermal damage, osmotic shock, or prior customer operating conditions before receipt by Expansa.

Unless otherwise expressly stated in the applicable Order, Expansa may, at its discretion, commingle customer-owned resin with resin of the same or compatible type within Expansa's broader resin float during regeneration and processing. Expansa is not required to return the same individual resin beads originally received.



## 1.5 Special Water Quality Requirements

Applications requiring enhanced purity standards, including but not limited to semiconductor manufacturing, microelectronics, pharmaceutical, laboratory-grade ultrapure water, chemical dilution, or other specialty process applications, must be reviewed and approved by Expansa in writing prior to service.

Additional polishing systems, specialty resin, multi-stage treatment, or single-use resin may be required to achieve enhanced water quality specifications.

Any customer-specific water quality requirement or performance guarantee must be expressly stated in the applicable Order or in the Performance Guarantee Addendum executed by both parties. The document must identify the guaranteed parameters, measurement location, operating conditions, testing method, guarantee period, exclusions, and available remedies.

## 1.6 Sampling and Testing

Unless otherwise specified in writing:

- Water quality measurements shall be taken at the outlet connection of the Expansa equipment.
- Grab samples shall be considered representative only when proper sampling procedures are followed.
- Atmospheric exposure may impact conductivity, resistivity, silica, and dissolved gas measurements.
- Field instrumentation shall be calibrated in accordance with manufacturer recommendations.

Laboratory analysis, third-party testing, and specialty analytical methods are available upon request and may be billed separately.

## 1.7 Exclusions and Limitations

The specifications in Section 1.1 are internal release criteria used by Expansa before pods or customer-owned resin are released. They are not field performance guarantees unless specifically incorporated into a mutually executed performance guarantee agreement.

Expansa shall not be responsible for water quality degradation caused by downstream piping, storage tanks, stagnant conditions, customer-owned equipment, cross-connections, atmospheric contamination, or improper handling after delivery from the Expansa system.

## 2. EXTRA PROCESSING AND SERVICE FEES

The following fee codes define additional processing or service events that may apply when the stated conditions occur. The applicable fee basis, tier, and supporting documentation shall be determined from the conditions and records described below.

### 2.1 FF-8001 and FF-8002, DI Trailer and Pod Extended Backwash Fee

**Definition:** The Extended Backwash Fee covers the cost of additional labor, utility consumption (water), and specialized mechanical/chemical pre-treatment required to fully remove excessive suspended solids, mud, silt, or hydrocarbon fouling (FOG) from ion exchange resin before the chemical regeneration process (acid/caustic) can successfully commence.

**Fee Basis:** A flat rate applied per cubic foot of resin processed, based on the fouling severity tier determined upon receipt and initial inspection

| Tier                                                | Description                                                                                                                                                    | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1: Mechanical Foulants (TSS/Silt)</b>            | Applies when the resin is fouled primarily by particulate matter, mud, or silt, requiring aggressive, non-chemical intervention.                               | <b>Triggered by meeting any of the following:</b><br><b>1. Excessive Backwash Time:</b> The initial backwash phase, designed for standard solids removal, exceeds 45 minutes and requires a secondary backwash cycle.<br><b>2. Visual Clumping:</b> Resin exhibits visible clumping, channeling, or excessive pressure drop (DP) during the initial backwash, requiring manual air lancing or water jets to break up the bed.<br><b>3. High Turbidity/Iron:</b> Incoming resin or backwash sample shows turbidity greater than 5 NTU or total iron greater than 5 ppm on the spent resin bed.                                                                                                |
| <b>2: Chemical Foulants (Oil, Grease, Organics)</b> | Applies when fouling is complex, involving chemical bonds (oils, heavy grease, or significant organic matter), requiring chemical agents to loosen the matrix. | <b>Triggered by meeting any of the following:</b><br><b>1. Hydrocarbon Presence:</b> Visual or olfactory evidence of oil, grease, or hydrocarbon contamination in the returned vessel or resin sample.<br><b>2. Caustic Brine Soak Required:</b> The resin requires the application of a surfactant wash, a hot water rinse, or a specialized caustic/brine pre-soak (e.g., Sodium Dithionite, Caustic Brine Squeeze) that adds >2 hours to the standard batch process time (4 hours).<br><b>3. Extreme Color/Organics:</b> The backwash effluent color exceeds standard benchmarks, indicating heavy organic/biological growth or tannin adsorption not easily removed by mechanical means. |

### Documentation Required Before Billing

For any application of FF-8001 or FF-8002, the Plant Manager or DI Service Manager must document the following in the job file before billing:

Visual Confirmation: Photos or video of the returned resin (if available) or the backwash effluent.

Operational Log: Record the total time of the backwash cycle and note the specific intervention required (e.g., "Air Scour used," "Second 45-min Backwash Cycle run," "Caustic Brine Soak initiated").

Lab/Test Data: Relevant data points (TSS, NTU, Iron, or FOG checks) confirming the nature of the foulant.



## 2.2 FF-8003, Acid Strip Fee

**Definition:** The Acid Strip Fee covers the specialized chemicals, extended contact time, and waste neutralization costs associated with aggressive cleaning of Cation Resin to remove heavy scaling or inorganic deposits (e.g., Iron, Manganese, or Calcium Sulfate scale) that cannot be eluted during the standard regeneration cycle.

**Fee Basis:** A flat rate applied per cubic foot of resin processed, based on the required cleaning protocol.

| Tier                                | Description                                                                                                                                                                                                                 | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Metallic Fouling Strip (Fe/Mn)   | Required for removal of metallic oxides and hydroxides that are chemically bonded to the resin, typically necessitating an HCl or a specialized bisulfite solution.                                                         | <b>Triggered by meeting any of the following:</b><br><b>1. High Residual Iron:</b> Analysis of resin after a standard regeneration cycle shows residual iron concentration of $\geq 10$ ppm by weight.<br><b>2. Capacity Loss:</b> The post-regeneration operating capacity of the unit is reduced by $\geq 15\%$ compared to the documented baseline capacity, attributable to metallic fouling.<br><b>3. Discolored Effluent:</b> The Acid Strip effluent shows visible, concentrated metallic color (e.g., yellow, brown, or rust) indicating successful elution of foulants not achieved by standard regeneration. |
| 2: Scaling/High Concentration Strip | Required for removal of difficult mineral scales (e.g., $\text{CaSO}_4$ , $\text{CaCO}_3$ ) that require elevated acid concentration, higher temperature, or multi-stage soaking and slow rinsing to prevent precipitation. | <b>Triggered by meeting any of the following:</b><br><b>1. High Differential Pressure (<math>\Delta P</math>):</b> Differential pressure across the Cation bed post-regeneration is $>50\%$ higher than the recorded clean, baseline $\Delta P$ for that vessel configuration.<br><b>2. Scaling Confirmation:</b> Visual inspection or laboratory analysis confirms the presence of mineral scale on the resin surface or within the bed matrix.                                                                                                                                                                       |

### Documentation Required Before Billing

For any application of Acid Strip Fee, the Plant Manager or DI Service Manager must document the following in the job file before billing:

Analytical Justification: Pre- and post-Acid Strip resin analysis results (for Iron/Manganese/Capacity) justifying the need for the intervention.

Operational Log: Record the specific chemical agent, concentration, temperature, and total contact/soak time (which must exceed the standard regeneration cycle time).

Safety Data: Confirmation that the required neutralization and waste disposal procedures for the spent acid solution were followed.

## 2.3 FF-8004, Caustic Brine Squeeze Fee (Organic/Biological Fouling)

**Definition:** The Caustic Brine Squeeze Fee covers the cost of specialized chemicals (Sodium Chloride and Caustic Soda), elevated temperatures, and extensive soak time required for the aggressive cleaning of Anion Resin contaminated by Total Organic Carbon (TOC) or severe biological fouling. This procedure is performed to restore hydraulic and exchange capacity compromised by the adsorption of organic matter.

**Fee Basis:** A flat rate applied per cubic foot of resin processed, reflecting the increased chemical and energy usage.

| Tier                        | Description                                                                                                                                                                                                                         | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Organic Fouling Strip    | Required when the anion resin exhibits significant organic retention, typically necessitating a hot NaCl and NaOH solution (Caustic Brine) for elution.                                                                             | <b>Triggered by meeting any of the following:</b><br><b>1. Visual Effluent:</b> The rinse or initial regeneration effluent is heavily discolored (tea-colored to dark brown/black) indicating mass elution of organic foulants.<br><b>2. High Residual TOC:</b> Resin analysis shows residual TOC content $\geq 2\%$ by weight, or a TOC leakage spike in the effluent post-regeneration.<br><b>3. Capacity Loss:</b> The post-regeneration operating capacity of the unit is reduced by $\geq 20\%$ compared to the documented baseline capacity, attributable to organic fouling. |
| 2: Biological Fouling Strip | Required when organic fouling is compounded by confirmed biological or microbial growth, requiring a disinfection step (e.g., Peracetic Acid or $\text{H}_2\text{O}_2$ ) prior to or in conjunction with the Caustic Brine Squeeze. | <b>Triggered by meeting any of the following:</b><br><b>1. Microbial Confirmation:</b> Laboratory analysis confirms the presence of significant algae, bacterial slime, or fungal growth on the resin or in the vessel (Total Plate Count exceeding facility threshold).<br><b>2. Excessive Contact Time:</b> The treatment requires a soak time of $\geq 8$ hours (e.g., an overnight soak) to ensure microbial kill and proper elution.                                                                                                                                           |

### Documentation Required Before Billing

For any application of a Caustic Brine Squeeze, the Plant Manager or DI Service Manager must document the following in the job file before billing:

Analytical Justification: Pre- and post-cleaning data (e.g., TOC effluent color/concentration, microbial testing) justifying the specialized procedure.

Operational Log: Record the specific chemical agent(s) used (NaCl concentration, NaOH concentration), the temperature of the solution, and the total soak duration.

Resin Integrity Note: Record a statement confirming that the resin type used was chemically stable at the elevated temperature (e.g., Type I SBA resin) to mitigate liability for thermal degradation.



## 2.4 FF-8005, Double Regeneration Fee

**Definition:** The Double Regeneration Fee is applied when a single standard chemical regeneration is insufficient to restore the resin to the required quality specification, necessitating a full repeat of the chemical regeneration sequence (acid or caustic) due to exceptionally high exhaustion, the presence of specific difficult-to-elute ions, or to convert new, as-shipped resin (typically in sodium (Na<sup>+</sup>) or chloride (Cl<sup>-</sup>) form) to the customer-required H<sup>+</sup>/OH<sup>-</sup> form. This fee covers the cost of using double the standard volume of regenerant chemicals and doubling the overall processing time.

**Fee Basis:** A flat rate applied per cubic foot of resin processed, covering the duplicated cost of chemicals and utilities.

| Tier                           | Description                                                                                                                                                                                                     | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Capacity Restoration Regen  | Required when the resin is over-exhausted, leading to immediate water quality failure after a single standard regeneration attempt.                                                                             | <b>Triggered by meeting any of the following:</b><br><b>1. High Exhaustion:</b> The resin enters the plant with a confirmed exhaustion level of $\geq 90\%$ of its nominal exchange capacity.<br><b>2. Immediate Leakage:</b> The resin fails to meet the final quality specification (e.g., conductivity $> 5 \mu\text{S}/\text{cm}$ or silica leakage $> 20 \text{ ppb}$ ) within the first minutes of the final rinse/quality check, making a second regeneration mandatory.<br><b>3. Rapid Success:</b> The second, subsequent regeneration successfully restores the unit to the required quality specifications within the normal time frame. |
| 2: Difficult Ion Elution Regen | Required when high concentrations of specific ions (e.g., sulfate on anion or heavy metals on cation) prevent effective elution in a single pass, but the contamination does not warrant a full chemical strip. | <b>Triggered by meeting any of the following:</b><br><b>1. Sulfate or Nitrate Load:</b> Confirmed high sulfate (anion) or high heavy metal (cation) loading on the spent resin that is known to require double dosage for effective elution.<br><b>2. Repeated Quality Failure:</b> The resin passes the Extended Backwash or Brine Squeeze checks but fails the final rinse target, and a repeat regeneration is the required solution.                                                                                                                                                                                                            |
| 3: New Resin Conversion        | Required for converting manufacturer-supplied resin (typically sodium or chloride form) to the fully regenerated hydrogen (H <sup>+</sup> ) or hydroxide (OH <sup>-</sup> ) form as specified by the customer.  | <b>Triggered by meeting the following:</b><br><b>1. Customer Request:</b> The customer explicitly requests new resin to be charged/regenerated into the H <sup>+</sup> or OH <sup>-</sup> form before shipment.<br><b>2. Initial Form:</b> The resin is documented as being received in the Na <sup>+</sup> or Cl <sup>-</sup> form from the supplier, necessitating the conversion regeneration.                                                                                                                                                                                                                                                   |

### Documentation Required Before Billing

For any application of Double Regen Fee, the Plant Manager or DI Service Manager must document the following in the job file before billing:

Initial Failure Data: Record of the conductivity, silica, or pH reading immediately following the first regeneration and rinse that failed to meet the specified quality criteria (or, in the case of Tier 3, confirmation of the initial resin form).

Chemical Usage Log: Record the total volume and concentration of acid/caustic used for both the first and second regeneration cycles.

Success Confirmation: Record of the final conductivity and rinse time from the successful second regeneration, demonstrating that the additional cycle was effective and necessary.

## 2.5 FF-8006, Canceled Order Fee (After Dispatch)

**Definition:** The Canceled Order Fee recovers the logistical costs (fuel, labor, truck time, wear and tear) incurred by Expansa for mobilizing DI Trailer or Pod equipment that is subsequently canceled by the customer after dispatch is initiated. This fee applies per mobile unit dispatched.

**Fee Basis:** A tiered charge based on the distance the Expansa truck and equipment traveled before the cancellation notice was received.

| Tier                           | Description                                                                                                                                                         | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Mobilization Confirmed      | Cancellation is received after the delivery vehicle is dispatched from the Expansa yard, but before reaching the 50-mile travel threshold.                          | <b>Triggered by meeting the following:</b><br><b>1. Dispatch Confirmation:</b> The Dispatch Log shows the driver was assigned and began transit (out-of-yard time is logged).<br><b>2. Initial Transit:</b> GPS or mileage log confirms the vehicle is less than 50 miles from the Expansa plant location when cancellation is received.                           |
| 2: En Route (Partial Delivery) | Cancellation is received after the delivery vehicle has passed the 50-mile travel threshold, incurring significant fuel and driver time.                            | <b>Triggered by meeting the following:</b><br><b>1. Mid-Transit Confirmation:</b> GPS or mileage log confirms the vehicle is between 50 and 150 miles from the Expansa plant location when cancellation is received.                                                                                                                                               |
| 3: On-Site Turnaround          | Cancellation is received only after the delivery vehicle has reached the customer's site, incurring the full cost of delivery, set-up preparation, and return time. | <b>Triggered by meeting the following:</b><br><b>1. Site Arrival:</b> GPS or driver confirmation shows the delivery vehicle has entered the customer's gate or property boundary.<br><b>2. No Unloading:</b> The cancellation is received before the delivery unit (trailer or pods) is disconnected, set down, or physically connected to the customer's process. |

### Documentation Required Before Billing

For any application of the Cancelled Order Fee, the DI Service Manager must document the following in the job file before billing:

Time Stamps: Record the time the vehicle was dispatched and the precise time the cancellation notice was received from the customer.

Geographic Evidence: A GPS log screenshot, truck telematics report, or driver log confirming the vehicle's location at the time of cancellation, justifying the tier applied.

Communication Record: Documentation (email, call log, or text message) of the customer's cancellation notice.



## **2.6 FF-8007, Delayed Driver Fee (On-Site Wait Time)**

**Definition:** The Delayed Driver Fee recovers the costs associated with Expansa's mobilized personnel and vehicles being detained at a customer's location for reasons beyond Expansa's control (e.g., site unpreparedness, lack of access, unready connection points, or administrative delays). This fee is applied when the delay exceeds the standard expected on-site service window.

**Fee Basis:** An hourly rate applied per driver/technician hour after a defined grace period.

| Tier                        | Description                                                                                                                                                                         | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Operational Detention    | Applies when site conditions or operational issues prevent the driver/technician from immediately commencing or completing the scheduled service (loading, offloading, swap, etc.). | <b>Triggered by meeting the following:</b><br><b>1. Arrival Confirmation:</b> The driver has arrived on site.<br><b>2. Grace Period Exceeded:</b> The on-site wait time for service to begin or resume exceeds a 60-minute (1.0 hour) grace period.<br><b>3. Equipment Unready:</b> Delay is caused by the customer's unready connection points, inaccessible equipment, or necessary personnel not being available to facilitate the service. |
| 2: Administrative Detention | Applies when administrative or safety requirements (not disclosed in advance) detain the Expansa personnel, creating an unbillable delay.                                           | <b>Triggered by meeting the following:</b><br><b>1. Arrival Confirmation:</b> The driver has arrived on site.<br><b>2. Administrative Hold:</b> Delay is caused by mandatory, unplanned on-site safety training, missing or incorrect access documentation, or lengthy required security escorts.<br><b>3. Grace Period Exceeded:</b> The detention time attributable to administrative issues exceeds a 60-minute (1.0 hour) grace period.    |

### **Documentation Required Before Billing**

For any application of Delayed Driver Fee, the DI Service Manager must document the following in the job file before billing:

Detailed Time Stamps: Record the vehicle arrival time, the time service was intended to start, the time the delay began, the time the delay ended, and the total accrued delay time.

Reason for Delay: A written narrative explaining the cause of the detention (e.g., "Customer forklift operator unavailable," "Unplanned 90-minute safety video required").

Customer Sign-Off: A signature or email confirmation from the customer's on-site representative acknowledging the total delay time and the reason.

## **2.7 FF-8008, On-Site Relocation Fee (Custom Move)**

**Definition:** The On-Site Relocation Fee covers the specialized labor, truck time, and on-site vehicle mobilization costs associated with moving Expansa-owned equipment (e.g., DI Trailers, Pods, or ancillary process equipment) from its initial, customer-approved drop location to a new location within the customer's facility or site boundary. This is billed as a separate service event after the initial delivery and placement are complete.

**Fee Basis:** A flat rate applied per relocation event, regardless of distance within the site.

| Tier                           | Description                                                                                                                              | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Standard On-Site Relocation | Applies when the equipment must be disconnected, moved, and re-spotted/re-leveled at a new location within the existing site boundaries. | <b>Triggered by meeting the following:</b><br><b>1. Initial Placement Complete:</b> The delivery unit was fully delivered, disconnected from the truck, and verified as correctly placed at the first designated location.<br><b>2. Customer Request:</b> The customer issues a formal request to the DI Service Manager or driver for the unit to be moved to a different on-site location.<br><b>3. Separate Service:</b> The relocation is not a correction of an Expansa error and occurs as a stand-alone service call or is initiated during a subsequent service trip solely for the purpose of moving the unit. |

### **Documentation Required Before Billing**

For any application of FF-8008, the DI Service Manager must document the following in the job file before billing:

Service Request Record: Record of the customer's written or verbal request for the relocation (date and time).

Time Log: Record of the labor hours required to perform the move, including disconnection, transit, and re-spotting/re-leveling time.

Location Change: Notation of the equipment's original location and its new, final destination within the site.



## **2.8 FF-8009, After-Hours Dispatch Fee**

**Definition:** The After-Hours Dispatch Fee covers the incremental labor costs, overtime premiums, and administrative overhead associated with mobilizing logistics personnel and equipment outside of Expansa's standard business operating hours. This fee ensures the availability of "on-call" responsiveness for emergency or last-minute industrial water needs.

**Fee Basis:** A flat rate applied per dispatched unit (Trailer or Pod-set) in addition to standard mobilization charges.

| Tier                        | Description                                                                                   | Application Criteria (Trigger)                                                                                                                                                                                                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Weeknight Dispatch       | Applies to dispatches initiated during the work week but outside of standard daylight shifts. | <b>Triggered by meeting the following:</b><br><b>1. Time Window:</b> The dispatch "Out-of-Yard" timestamp occurs between 17:01 and 06:59, Monday through Thursday.<br><b>2. Notice Period:</b> The order was placed with less than 8 hours of lead time before the required after-hours departure. |
| 2: Weekend/Holiday Dispatch | Applies to dispatches requiring mobilization during high-premium labor windows.               | <b>Triggered by meeting the following:</b><br><b>1. Time Window:</b> The dispatch "Out-of-Yard" timestamp occurs between 17:01 Friday and 06:59 Monday, or at any time during a Company-Recognized Holiday.                                                                                        |

### **Documentation Required Before Billing**

For any application of FF-8009, the Dispatcher or VP of Operations must document the following in the job file before billing:

Timestamp Verification: Record the exact "Out-of-Yard" time from the GPS or Driver Log.

Order Receipt Log: Record the time the customer's request was officially received to justify the "After-Hours" designation vs. a scheduled morning departure.

Personnel Log: Identification of the driver and support staff mobilized to verify overtime eligibility.

## **2.9 FF-8010, Canceled Order Fee (Pre-Dispatch)**

**Definition:** The Canceled Order Fee (Pre-Dispatch) recovers the costs of administrative scheduling, resin regeneration specific to the order, and physical staging/loading labor incurred by Expansa before a vehicle is dispatched. This fee applies when a confirmed order is canceled after a Purchase Order (PO) or Order Confirmation is issued, but before the vehicle leaves the Expansa yard.

**Fee Basis:** A flat rate applied per unit, tiered based on the stage of preparation at the time of cancellation.

| Tier                                  | Description                                                                                                                                           | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Administrative Cancellation        | Cancellation occurs after order confirmation but before physical staging or loading of equipment has commenced.                                       | <b>Triggered by meeting the following:</b><br><b>1. Confirmed Status:</b> A formal PO or signed Order Confirmation has been received by Expansa.<br><b>2. Timing:</b> Cancellation is received more than 24 hours prior to the scheduled dispatch time.<br><b>3. Admin Work:</b> Covers the costs of project setup, logistics scheduling, and capacity reservation.    |
| 2: Operational/Staging Cancellation   | Cancellation occurs after the equipment has been staged or loaded, but before the vehicle has departed the facility.                                  | <b>Triggered by meeting the following:</b><br><b>1. Loading Status:</b> The Yard Log or Plant Manager confirms the unit (Trailer or Pods) has been moved to the loading dock, filled, or secured to a tractor.<br><b>2. Timing:</b> Cancellation is received less than 24 hours prior to the scheduled dispatch time.                                                  |
| 3: Specific Regeneration Cancellation | Cancellation occurs after resin has been specifically regenerated or customized to meet the unique quality/form requirements of the customer's order. | <b>Triggered by meeting the following:</b><br><b>1. Regen Complete:</b> The Plant Production Log shows resin was processed specifically for this order (e.g., meeting a unique silica spec or conversion to H/OH form).<br><b>2. Sunk Cost:</b> Covers the chemicals, utilities, and labor consumed for a batch that must now be returned to inventory or reprocessed. |

### **Documentation Required Before Billing**

For any application of FF-8010, the Customer Service Manager or Plant Manager must document the following in the job file before billing:

Order Record: A copy of the signed PO or Order Confirmation.

Cancellation Timestamp: Documented email or call log showing the exact time the cancellation was received.

Operational Evidence: For Tiers 2 and 3, a copy of the Yard Log (showing loading/staging) or the Regeneration Batch Log (showing completed processing) must be provided.



## **2.10 FF-8011-13, Order Expedite Fee (Priority Queue)**

**Definition:** The Order Expedite Fee recovers the administrative and operational costs associated with prioritizing a specific customer order ahead of the existing production or logistics queue. This fee applies when a customer requires guaranteed processing or dispatch significantly faster than standard lead times, necessitating the reallocation of labor, equipment, or regeneration capacity.

**Fee Basis:** A flat rate applied per unit (Trailer, Pod-set, or customer-owned resin) processed under priority status.

| Tier                             | Description                                                                                                                            | Application Criteria (Trigger)                                                                                                                                                                                                                                                                                                                        |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Logistics Expedite            | Priority scheduling of logistics and transport to move the order to the front of the dispatch queue without altering production.       | <b>Triggered by meeting the following:</b><br><b>1. Lead Time:</b> Order requires dispatch in less than 12 hours from the time of PO receipt during standard business hours.<br><b>2. Queue Jump:</b> Dispatch requires re-tasking a driver or vehicle originally assigned to a lower-priority or internal stock movement.                            |
| 2: Production Expedite           | Requires the Plant Manager to alter the regeneration schedule, bumping the customer's resin batch to the front of the production line. | <b>Triggered by meeting the following:</b><br><b>1. Regen Priority:</b> The regeneration batch is moved ahead of other confirmed client orders or internal inventory replenishment batches already in the daily plan.<br><b>2. Operational Pivot:</b> Requires immediate setup of a batch or tank swap that interrupts standard plant flow.           |
| 3: Emergency "Break-In" Priority | Requires the immediate suspension of current plant operations or the mobilization of extra labor to process the order instantly.       | <b>Triggered by meeting the following:</b><br><b>1. Immediate Start:</b> Customer requires processing to begin immediately, necessitating the pausing of a non-critical regeneration batch already in progress.<br><b>2. Labor Adjustment:</b> Requires calling in additional personnel or extending current shifts to handle the emergency workload. |

### **Documentation Required Before Billing**

For any application of FF-8011-13, the VP of Operations or Plant Manager must document the following in the job file before billing:

Request Verification: Customer request and acknowledgment of the priority fee.

Production/Dispatch Log: Original and revised schedules showing the order's advancement.

Operational Impact Note: Summary of the schedule, staffing, or production changes made to accommodate the expedite.





### 3. REGENERATION SURCHARGE CALCULATIONS

#### 3.1 SC-8001, Acid Surcharge

The Acid Surcharge is based on Expansa's weighted average delivered acid cost and is subject to change as market pricing, freight, supplier charges, and other related costs fluctuate. Expansa may recalculate and adjust the surcharge periodically without amending the applicable Order. The surcharge in effect when the applicable regeneration service is performed will apply.

The surcharge is intended to account for significant increases in acid pricing above the established base acid price. For every \$25 per ton increase above the base acid price, the surcharge is \$100 per trailer regeneration, calculated proportionally.

No credit or negative surcharge will apply if acid pricing falls below the base acid price. The surcharge is calculated as follows:

Determine the difference between the previous month's weighted average acid cost and the base acid price.

Divide that difference by \$25.

Multiply the result by \$100 to determine the applicable surcharge per trailer regeneration.

| Base HCl Price     | \$336/ton                    |
|--------------------|------------------------------|
| Index              | \$25/ton = \$100 per trailer |
| Previous Month WAC | \$380/ton                    |
| Acid Surcharge     | \$176                        |

Example 1. Formula Slightly Above Base:

$$(380 - 336 = 44)$$

$$(44/25 = 1.76)$$

$$(1.76 \times 100 = \$176)$$

Example 2. Formula Slightly Below Base:

$$(300 - 336 = -36)$$

$$(-36 \div 25 = -1.44)$$

Negative Value = No Service Charge

#### 3.2 SC-8002, Caustic Surcharge

The Caustic Surcharge is based on Expansa's weighted average delivered caustic cost and is subject to change as market pricing, freight, supplier charges, and other related costs fluctuate. Expansa may recalculate and adjust the surcharge periodically without amending the applicable Order. The surcharge in effect when the applicable regeneration service is performed will apply.

The surcharge is intended to account for significant increases in caustic pricing above the established base caustic price. For every \$50 per ton increase above the base caustic price, the surcharge is \$100 per trailer regeneration, calculated proportionally.

The surcharge is calculated as follows:

Determine the difference between the previous month's weighted average caustic cost and the base caustic price.

Divide that difference by \$50.

Multiply the result by \$100 to determine the applicable surcharge per trailer regeneration.

| Base NaOH Price    | \$250/ton                    |
|--------------------|------------------------------|
| Index              | \$50/ton = \$100 per trailer |
| Previous Month WAC | \$300/ton                    |
| Caustic Surcharge  | \$100                        |

Example 1. Formula Slightly Above Base:

$$(300 - 250 = 50)$$

$$(50 \div 50 = 1)$$

$$(1 \times 100 = \$100)$$

Example 2. Formula Slightly Below Base:

$$(225 - 250 = -25; -25 \div 50 = -0.5)$$

Negative Value = No Service Charge





### **3.3 SC-8003, Fuel Surcharge**

The Fuel Surcharge is calculated monthly based on the prior month's average U.S. diesel fuel price as published by the U.S. Energy Information Administration. Historical pricing data can be accessed through the EIA diesel fuel pricing reports.

If the actual cost of transportation exceeds the amount calculated by more than five (5) percent under Expansa's standard mileage or fuel surcharge formulas, Expansa at its sole discretion may arrange and prepay the applicable freight and add the actual freight cost, plus a fifteen percent (15%) administrative charge, to the customer's invoice. In such cases, the cost-plus amount will apply in place of the standard calculated transportation charge.

Transportation charges are based on a standard mileage rate of \$3.80 per mile, which includes normal operating costs associated with transporting Expansa equipment, including driver wages, fuel, insurance, maintenance, equipment depreciation, dispatching, and general fleet overhead.

The standard mileage rate is based on a baseline diesel fuel price of \$3.62 per gallon. In periods where diesel fuel pricing exceeds the baseline fuel price, an additional Fuel Surcharge may apply as outlined below. The Fuel Surcharge is intended solely to recover incremental fuel costs above the baseline assumption and is calculated separately from the standard mileage rate.

The Fuel Surcharge calculation is based on the following factors:

- Base diesel fuel price: \$3.62 per gallon
- Previous month's published average diesel fuel price
- Average tractor fuel economy: 5 MPG
- Distance traveled between the applicable Expansa service center and the customer site

The surcharge is calculated as follows:

- Subtract the base diesel fuel price from the previous month's average diesel fuel price.
- Divide the result by 5 MPG to determine the additional fuel cost per mile.
- Multiply the additional fuel cost per mile by the applicable mileage to determine the total Fuel Surcharge.

#### **Example:**

If the previous month's average diesel fuel price is \$5.47 per gallon:

- $\$5.47 - \$3.62 = \$1.85$  additional fuel cost per gallon
- $\$1.85 \div 5 \text{ MPG} = \$0.37$  additional fuel cost per mile For a 203-mile one-way trip:
- $203 \times \$0.37 = \$75.11$  Fuel Surcharge

Mileage is determined based on the distance between the customer site and the Expansa service center closest to the customer location. Fuel surcharge calculations will not increase due to equipment being dispatched from a different or farther Expansa service center.

No credit or negative surcharge will apply if diesel fuel pricing falls below the baseline fuel price.

**Pod and Customer-Owned Resin Freight:** Unless otherwise stated in the applicable Order, transportation of DI pods, customer-owned resin, and other non-trailer shipments is not subject to the standard trailer mileage or fuel surcharge formulas. Freight will be billed at the then-current market rate, plus fifteen percent (15%). When Expansa arranges and prepays third-party freight, the charge will be based on the actual carrier cost plus fifteen percent (15%).