

CSM NF REFERENCE LIST

No.	Location	Application	Model	Quantities	Capacity	Start-up Date
1	USA	Potable Water - Skyco Plant in Dare county	NE8040-90	567 EA	11,356 m³/day (3.0 MGD)	2017
2		Potable Water - Norwood WTP North Miami Beach	NE8040-90	2,268 EA	45,425 m³/day (12.0 MGD)	2019
3		Potable Water - Cherry Point WTP	NE8040-90	1,134 EA	22,712 m³/day (6.0 MGD)	2017
4		Potable Water - Moundsville WV NF System	NE8040-90	492 EA	10,599 m³/day (2.8 MGD)	2017
5		Potable Water - Everglades City Membrane System	NE8040-90 NE8040-70	84 EA	2,082 m³/day (0.55 MGD)	2015
6		Potable Water - Yucaipa Valley Water District Regional WFF	NE8040-40	840 EA	22,712 m³/day (6.0 MGD)	2014
7		Process Water - Mining	NE8040-40	210 EA	10,599 m³/day (2.8 MGD)	2017
8		Potable Water - Orange Tree Utilities NF System	RE8040-BLN NE8040-90	126 EA	2,839 m³/day (0.75 MGD)	2013
9	CANADA	Maple syrup concentration	NE16040-90	50 EA	Unknown	2013
			NE8040-90	1,000-1,500 EA		
			NE4040-90	200~300 EA		
10	GERMANY	Beverage - Company A	NE8040-70	200 EA	~ 4,400m³/day (1.16 MGD)	2019
11		Beverage - Company B	NE8040-90	102 EA	~ 2,300m³/day (0.61 MGD)	2017
12	RUSSIA	Industrial water - Company C	NE8040-40	240EA	~ 5,300m³/day (1.40 MGD)	2018
13	SPAIN	Leachate - Company D	NE8040-70	50 EA	~ 1,100m³/day (0.29 MGD)	2021
			NE8040-90			
14	CHINA	Dyeing waste water	TZD-NF1(NF)	792 EA	12,960m³/day (3.42 MGD)	2020
15		Chloro-alkali Denitrification	SR08040-L(NF)	408 EA	5,280m³/day (1.39 MGD)	2023
16		Chloro-alkali Denitrification	SR08040(NF)	288 EA	6,240m³/day(1.65 MGD)	2021
17		BYD Auto Concentration	Level-1 NE8040-ARM	18 EA	260m³/day(0.07 MGD)	2023
			Brine NF NE8040-ARM	3 EA	96m³/day(0.03 MGD)	
18		ZLD	NE8040-70	300 EA	280 m³/day(0.07 MGD)	2021
19		Industrial water reuse	NE8040-40	1,512 EA	24,000 m³/day(6.34 MGD)	2023
20		Municipal Drinking Water	TMN20H-400(NF)	3,360 EA	100,000 m³/day(26.42MGD)	2018
21	REPUBLIC OF KOREA	Drinking Water - Gangwon Samcheok	NE8040-90	1,134 EA	20,000 m³/day(5.28 MGD)	2013
22		Drinking Water - Gangwon Yeongwol	NE8040-90	672 EA	10,000 m³/day(2.64 MGD)	2016
23		Drinking Water - Chungbuk Danyang	NE8040-90	588 EA	10,000 m³/day(2.64 MGD)	2023
24		Drinking Water - Jeju Hallim	NE8040-90	714 EA	14,000 m³/day(3.70 MGD)	2015
25		PVA Polymer Removal	NE8040-40	150~200 EA	Under 24 m³/day (0.006 MGD)	2012
26		Cosmetic raw materials	NE8040-70	20 EA	Under 1 m³/day (0.0003 MGD)	2013
27		Livestock wastewater	NE8040-90	12 EA	10 m³/day (0.0026 MGD)	2000
			NE8040-70			
28	INDIA	Dyes Concentration	NE8040-40	9 EA	12.3 m³/day (0.0032 MGD)	2021
29		Colourless Brine Recovery in Sugar Industry	NE8040-70	12 EA	15 m³/day (0.004 MGD)	2021
30	THAILAND	Drinking Water	NE8040-90	114 EA	2,184 m³/day (0.58 MGD)	2022

GLOBAL NF REFERENCE

USA



Potable Water - Skyco Plant in Dare county

Location	Manteo, North Carolina
Designed Capacity	11,356m ³ /day(3.0 MGD)
Type of Raw Water	Freshwater wells
Purpose of Facility	Removal of Fluoride & Sodium
Target Water Quality	Unknown
Start-up Date	2017
Applied Products Quantities	NE8040-90 18:9(3 train, 7M/pv), 567EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

USA



Potable Water - Norwood WTP North Miami Beach

Location	Miami, Florida
Designed Capacity	45,425 m ³ /day (12.0 MGD)
Type of Raw Water	Biscayne Aquifer & Biscayne Aquifer
Purpose of Facility	Removal of iron, Color, Hardness
Target Water Quality	Unknown
Start-up Date	2019
Applied Products Quantities	NE8040-90 54:27 (4 trains, 7M/pv), 2,268EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

USA



Potable Water – Cherry Point WTP

Location	Cherry Point, North Carolina
Designed Capacity	22,712 m ³ /day (6.0 MGD)
Type of Raw Water	Castle Hayne Aquifer water
Purpose of Facility	Removal of Sodium, Chloride, TDS, and Color
Target Water Quality	Na ⁺ : 30mg/L, Cl ⁻ : 30mg/L, TDS: 80 mg/L, Color: 2CU
Start-up Date	2017
Applied Products Quantities	NE8040-90 38:16 (3 trains, 7M/pv), 1,134EA
Process Flow	Strainers → MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

USA



Potable Water – Moundsville WV NF System

Location	Moundsville, Virginia
Designed Capacity	10,599 m ³ /day (2.8 MGD)
Type of Raw Water	Well water
Purpose of Facility	Removal of TDS & Hardness
Target Water Quality	TDS: <500mg/L, Total hardness: >90%
Start-up Date	2017
Applied Products Quantities	NE8040-90 27:14 (2 trains, 6M/pv), 492EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

USA



Potable Water - Everglades City Membrane System

Location	Naples, Florida
Designed Capacity	2,082 m ³ /day (0.55 MGD)
Type of Raw Water	Surficial aquifer
Purpose of Facility	Removal of TOC & Color
Target Water Quality	Unknown
Start-up Date	2015
Applied Products Quantities	NE8040-90 / NE8040-70 4:2:1 (2 trains, 6M/pv), 84EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

USA



Potable Water - Yucaipa Valley Water District Regional WFF

Location	Yucaipa Valley, California
Designed Capacity	22,712 m ³ /day (6.0 MGD)
Type of Raw Water	Yucaipa Groundwater Basin
Purpose of Facility	DBP removal and limiting TDS rejection
Target Water Quality	Unknown
Start-up Date	2014
Applied Products Quantities	NE8040-40 40:20 (2 trains, 7M/pv), 840EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

USA



Process Water – Mining

Location	USA
Designed Capacity	10,599 m ³ /day (2.8 MGD)
Type of Raw Water	Pond Water
Purpose of Facility	Removal of Arsenic & Divalent ions
Target Water Quality	Arsenic removal
Start-up Date	2017
Applied Products Quantities	NE8040-40 / 210EA
Process Flow	Disinfection → UF → NF



CONTACT INFO



GLOBAL NF REFERENCE

USA



Potable Water - Orange Tree Utilities NF System

Location	Naples, Florida
Designed Capacity	2,839 m ³ /day (0.75 MGD)
Type of Raw Water	Surficial aquifer
Purpose of Facility	Removal of TOC & Color
Target Water Quality	Unknown
Start-up Date	2013
Applied Products Quantities	RE8040-BLN / NE8040-90 6:3 (2 trains, 7M/pv), 126EA
Process Flow	MF → RO/NF



CONTACT INFO



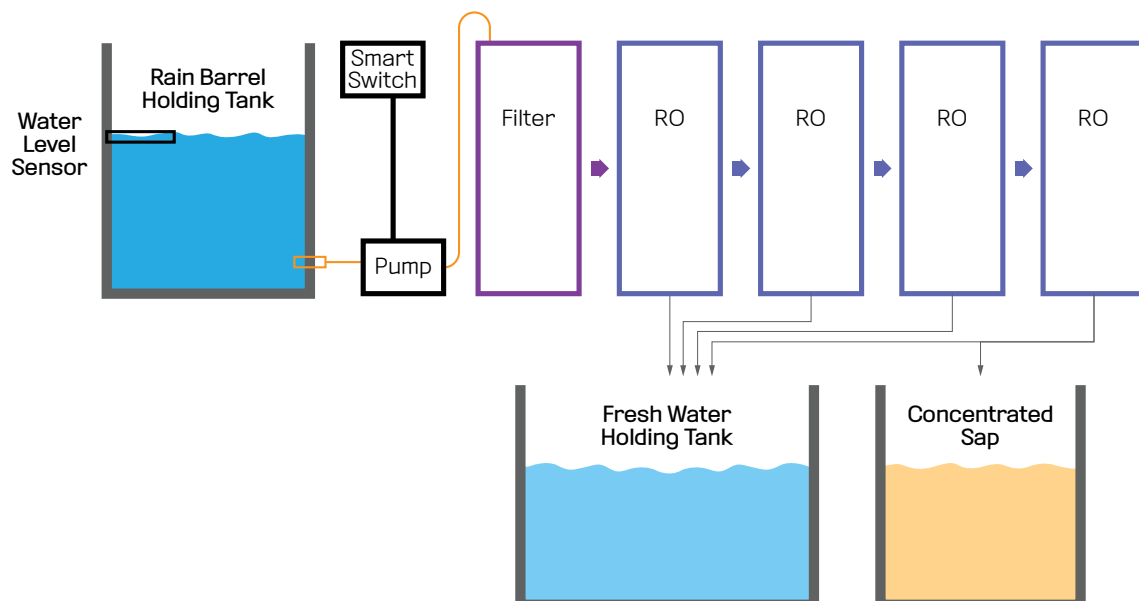
GLOBAL NF REFERENCE

CANADA



Maple syrup concentration

Location	Quebec
Application	Maple syrup application
Type of Raw Water	Harvested Maple Sap
Purpose of Facility	Maple syrup concentration
Target Water Quality	Unknown
Sales since	2013
Applied Products, Quantities (Annual replacement)	NE16040-90: 50EA NE8040-90: 1,000 - 1,500EA NE4040-90: 200 - 300EA



CONTACT INFO



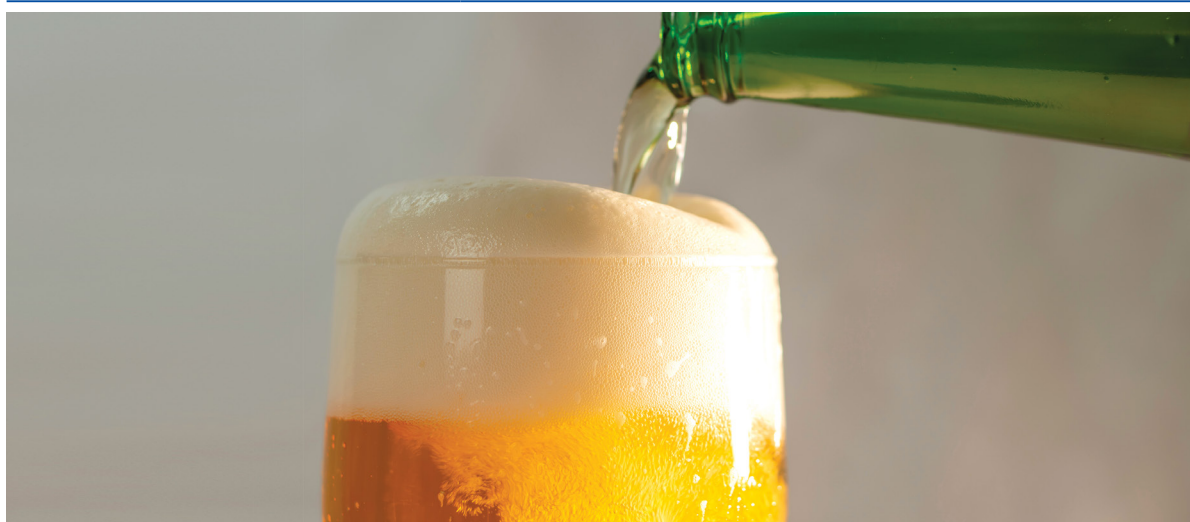
GLOBAL NF REFERENCE

GERMANY



Beverage – Company A

Location	North Rhine-Westphalia
Designed Capacity	~ 4,400m ³ /day (1.16 MGD)
Type of Feed	Wheat type Beer - filtered
Purpose of Facility	De-alcoholization of beer
Target Water Quality	Specific alcohol content
Start-up Date	2019
Applied Products, Quantities	NE8040-70 / 200EA
Process Flow	Fermentation → Filtration → De-alcoholization



CONTACT INFO



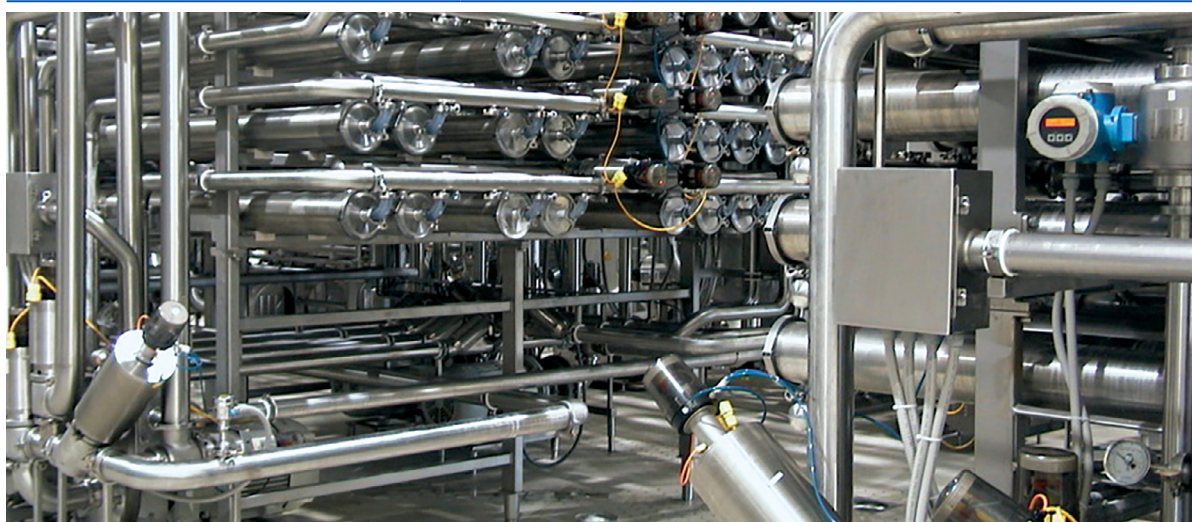
GLOBAL NF REFERENCE

GERMANY



Beverage – Company B

Location	North Rhine-Westphalia
Designed Capacity	~ 2,300m ³ /day (0.61 MGD)
Type of Feed	Pilsner type Beer - filtered
Purpose of Facility	De-alcoholization of beer
Target Water Quality	Specific alcohol content
Start-up Date	2017
Applied Products, Quantities	NE8040-90 / 102EA
Process Flow	Fermentation → Filtration → De-alcoholization

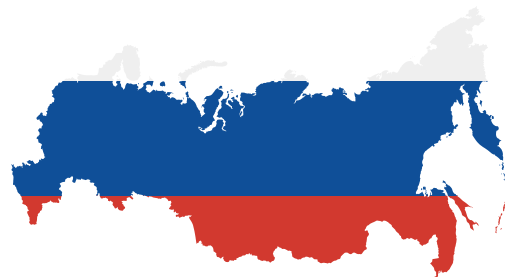


CONTACT INFO



GLOBAL NF REFERENCE

RUSSIA



Industrial water – Company C

Location	Komi Republic
Designed Capacity	~ 5,300m ³ /day (1.40 MGD)
Type of Raw Water	Brackish surface
Purpose of Facility	Color removal
Target Water Quality	Maximum removal of divalent compounds
Start-up Date	2018
Applied Products, Quantities	NE8040-40 / 240EA
Process Flow	Unknown



CONTACT INFO



GLOBAL NF REFERENCE

SPAIN



Leachate – Company D

Location	Toledo & Barbastro
Designed Capacity	~ 1,100m ³ /day (0.29 MGD)
Type of Raw Water	Leachate
Purpose of Facility	Treatment of Leachate Water
Target Water Quality	Partial selectivity of divalent compounds
Start-up Date	2021
Applied Products, Quantities	NE8040-70 & NE8040-90 / 50EA
Process Flow	Unknown



CONTACT INFO



GLOBAL NF REFERENCE

CHINA



Dyeing waste water

Location	Foshan City, Guangdong Province
Designed Capacity	12,960 m ³ /day (3.42 MGD)
Type of Raw Water	Brine water of level-1 RO
Purpose of Facility	ZLD
Target Water Quality	Unknown
Start-up Date	2020
Applied Products, Quantities	TZD-NF1(NF) / 528EA (2020) + 264EA (2022)
Process Flow	Softening → UF → NF



CONTACT INFO



GLOBAL NF REFERENCE

CHINA



Chloro-alkali Denitrification

Location	Jiangsu Province
Designed Capacity	5,280 m ³ /day (1.39 MGD)
Type of Raw Water	Dechlorinated dilute brine
Purpose of Facility	Denitrification
Target Water Quality	SO10g/L → 2g/L
Start-up Date	2023
Applied Products, Quantities	SR08040-L(NF) / 408EA
Process Flow	AC → MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

CHINA



Chloro-alkali Denitrification

Location	Jiangsu Province
Designed Capacity	6,240 m ³ /day(1.65 MGD)
Type of Raw Water	Dechlorinated dilute brine
Purpose of Facility	Denitrification
Target Water Quality	SO 5g/L → ≤ 1.5 g/L
Start-up Date	2021
Applied Products, Quantities	SR08040(NF) / 288EA
Process Flow	AC → MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

CHINA



BYD Auto Concentration

Location	Inner Mongolia
Designed Capacity	260 m ³ /day(0.07 MGD) level-1 NF 96 m ³ /day(0.03 MGD) brine NF
Type of Raw Water	Copper-containing wastewater
Purpose of Facility	Copper sulfate concentration
Target Water Quality	30g/L
Start-up Date	2023
Applied Products, Quantities	Level-1 NE8040-ARM/18EA Brine NF NE8040-ARM/3EA
Process Flow	Unknown



CONTACT INFO



GLOBAL NF REFERENCE

CHINA



ZLD

Location	China
Designed Capacity	280 m ³ /day(0.07 MGD)
Type of Raw Water	Chemical Wastewater
Purpose of Facility	Salt separation
Target Water Quality	Separate the monovalent ions from the bivalent ions in water
Start-up Date	2021
Applied Products, Quantities	NE8040-70 / 300EA
Process Flow	Wastewater → Crystallization → UF → NF



CONTACT INFO



GLOBAL NF REFERENCE

CHINA



Industrial Water Reuse

Location	Shandong province
Designed Capacity	24,000 m ³ /day(6.34 MGD)
Type of Raw Water	reuse
Purpose of Facility	Removal hypervalent ion and organics
Target Water Quality	Sulfate > 90%
Start-up Date	2023
Applied Products, Quantities	NE8040-40 / 1,512EA
Process Flow	Reused water → UF → NF → level1 RO → level2 RO → brine RO



CONTACT INFO



GLOBAL NF REFERENCE

CHINA



Municipal Drinking Water

Location	Fujian province
Designed Capacity	100,000 m ³ /day(26.42MGD)
Type of Raw Water	River water
Purpose of Facility	Removal of chloride
Target Water Quality	NACL ≤ 150mg/L, TDS ≤ 1000mg/L
Start-up Date	2018
Applied Products, Quantities	TMN20H-400(NF) / 3,360EA
Process Flow	River water → V type filtering sink → UF → NF → RO



CONTACT INFO



GLOBAL NF REFERENCE

Republic of Korea



Drinking Water – Gangwon Samcheok

Location	Samcheok-si, Gangwon-do
Designed Capacity	20,000 m ³ /day(5.28 MGD)
Type of Raw Water	Ground water
Purpose of Facility	Removal of hardness
Target Water Quality	Hardness 269ppm → 45ppm
Start-up Date	2013
Applied Products, Quantities	NE8040-90 / 1,134EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

Republic of Korea



Drinking Water - Gangwon Yeongwol

Location	Yeongwol-gun, Gangwon-do
Designed Capacity	10,000 m ³ /day(2.64 MGD)
Type of Raw Water	Ground water
Purpose of Facility	Removal of hardness
Target Water Quality	Hardness 284ppm → 40ppm
Start-up Date	2016
Applied Products, Quantities	NE8040-90 / 672EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

Republic of Korea



Drinking Water – Chungbuk Danyang

Location	Danyang-gun, Chungcheongbuk-do
Designed Capacity	10,000 m ³ /day(2.64 MGD)
Type of Raw Water	River water
Purpose of Facility	Removal of hardness
Target Water Quality	Hardness 165ppm → 25ppm
Start-up Date	2023
Applied Products, Quantities	NE8040-90 / 588EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

Republic of Korea



Drinking Water – Jeju Hallim

Location	Hallim-eup, Jeju-si
Designed Capacity	14,000 m ³ /day(3.70 MGD)
Type of Raw Water	Ground water
Purpose of Facility	Removal of nitrate nitrogen
Target Water Quality	Nitrate nitrogen 10ppm → 3.5ppm
Start-up Date	2015
Applied Products, Quantities	NE8040-90 / 714EA
Process Flow	MF → NF



CONTACT INFO



GLOBAL NF REFERENCE

Republic of Korea



PVA Polymer Removal

Location	Poseung-eup, Pyeongtaek-si, Gyeonggi-do
Designed Capacity	Under 24 m ³ /day (0.006 MGD)
Type of Raw Water	Wastewater
Purpose of Facility	Removal of PVA polymer
Target Water Quality	PVA Rejection over 96%
Start-up Date	2012
Applied Products, Quantities	NE8040-40 / 150~200EA
Process Flow	Direct



CONTACT INFO



GLOBAL NF REFERENCE

Republic of Korea



Cosmetic raw materials

Location	Ochang-eup, Cheongwon-gu, Cheongju-si, Chungcheongbuk-do
Designed Capacity	Under 1 m ³ /day (0.0003 MGD)
Type of Raw Water	Vitamin C & salt(Cl) solution
Purpose of Facility	Removal of VitaminC & salt(Cl)
Target Water Quality	Unknown
Start-up Date	2013
Applied Products, Quantities	NE8040-70 / 20EA
Process Flow	Direct



CONTACT INFO



GLOBAL NF REFERENCE

Republic of Korea



Livestock wastewater

Location	Gyeonggi-do, Gangwon-do
Designed Capacity	10 m ³ /day (0.0026 MGD)
Type of Raw Water	Livestock wastewater (pig excreta)
Purpose of Facility	Removal of TOC
Target Water Quality	TOC < 120 ppm
Start-up Date	2000
Applied Products, Quantities	NE8040-90/70 12EA + RO (per site)
Process Flow	Disinfection → Biological treatment → NF → (RO)



CONTACT INFO



GLOBAL NF REFERENCE

INDIA



Dyes Concentration

Location	Shreeji Color Chem, Vatva
Designed Capacity	12.3 m ³ /day (0.0032 MGD)
Type of Raw Water	Dyes
Purpose of Facility	Dyes Concentration
Target Water Quality	TOC < 120 ppm
Start-up Date	2021
Applied Products, Quantities	NE8040-40, 9EA
Process Flow	Dye Bath → CF → NF System



CONTACT INFO



GLOBAL NF REFERENCE

INDIA



Colourless Brine Recovery in Sugar Industry

Location	Dhampur Sugar Ltd, Dhampur
Designed Capacity	15 m ³ /day (0.004 MGD)
Type of Raw Water	Reddish Brine solution
Purpose of Facility	Colourless Brine recovery
Target Water Quality	Product with colourless Brine
Start-up Date	2021
Applied Products, Quantities	NE8040-70, 12EA
Process Flow	ETP → PSF → NF System



CONTACT INFO



GLOBAL NF REFERENCE

THAILAND



Drinking Water

Location	Surin
Designed Capacity	2,184 m ³ /day (0.58 MGD)
Type of Raw Water	Ground water
Purpose of Facility	Removal of TDS for Mineral water
Target Water Quality	TDS 1,300 ppm → < 50 ppm
Start-up Date	2022
Applied Products, Quantities	NE8040-90 / 114 EA
Process Flow	Raw Water → Sand filter → Carbon → NF → RO



CONTACT INFO

