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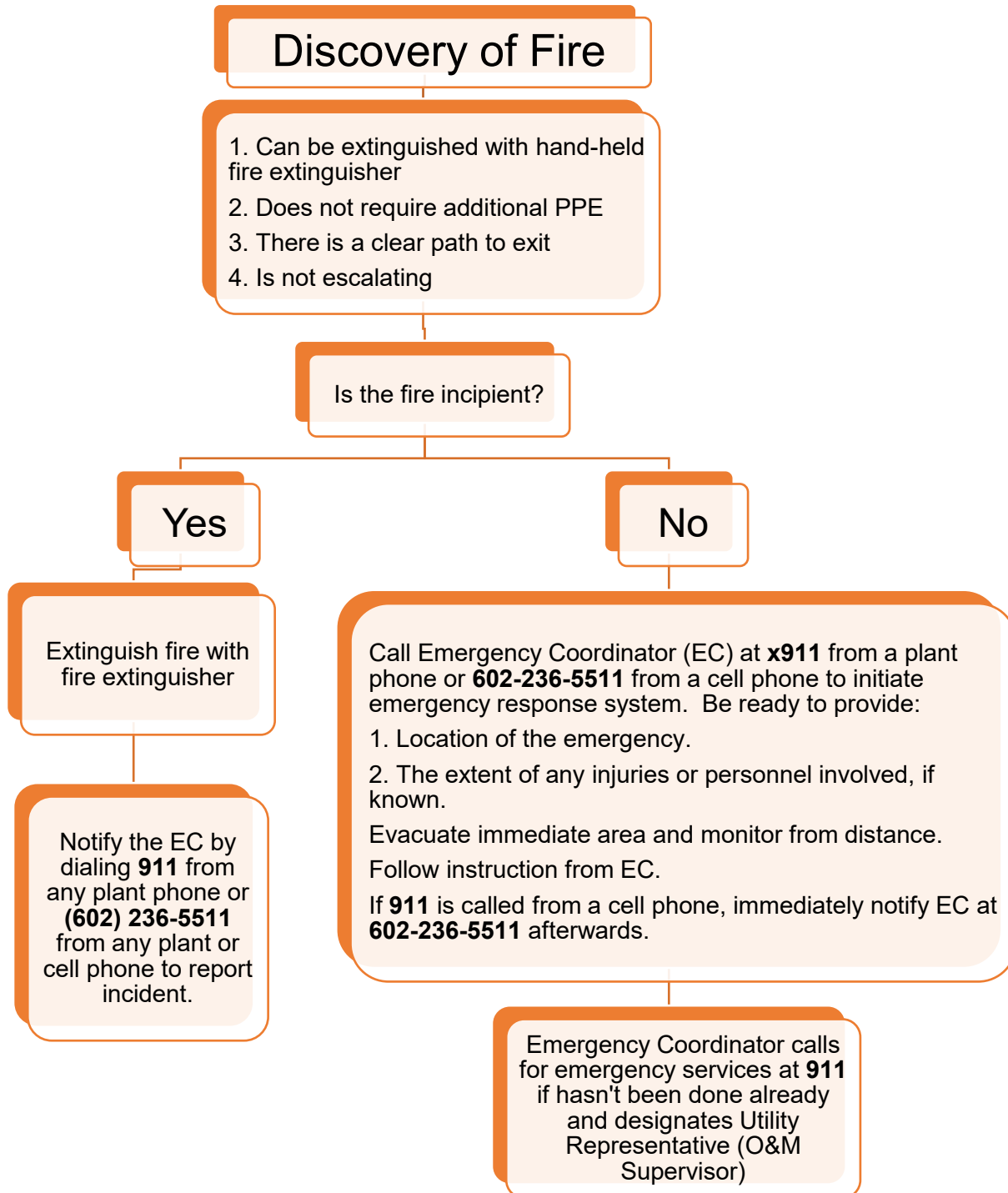
FACILITY EMERGENCY RESPONSE PLAN

Santan Generating Station

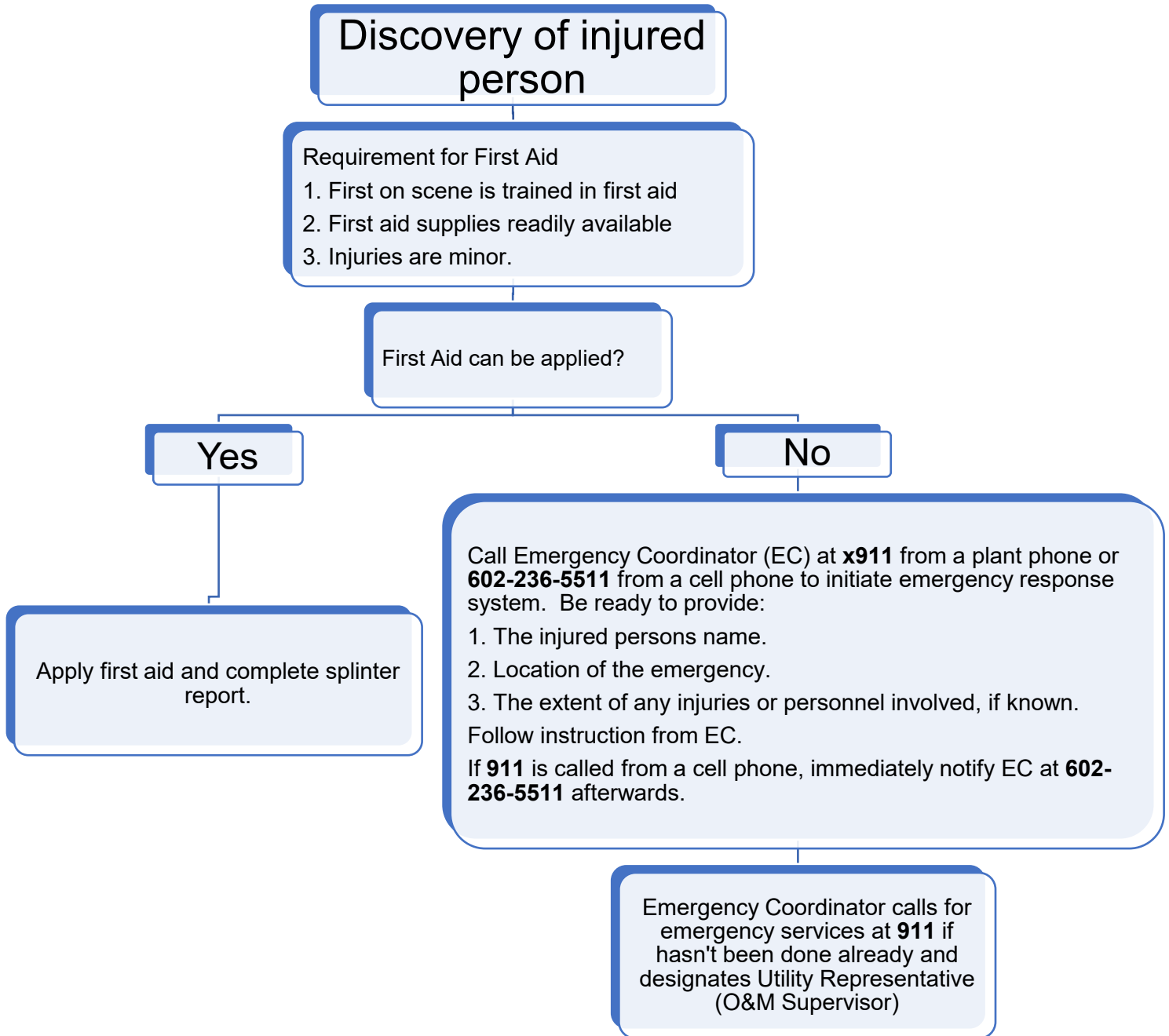
1005 S Val Vista Drive, Gilbert, AZ

Prepared by
Salt River Project Santan
Generating Station
March 2023

Quick Guide: Fire Discovery Flow Chart



Quick Guide: Medical Emergency Flow Chart



Quick Guide: Release Discovery Flow Chart

Discovery of release/spill

Requirement for Incidental Release

1. Released material has not entered drains.
2. First on Scene is familiar with material and associated hazards.
3. First on Scene is familiar with required PPE to address release and can readily obtain and use PPE.
4. First on Scene knows what response equipment is needed to address release and can readily obtain and use equipment.

Is the release incidental?

Yes

Clean up spill with appropriate materials/PPE and containerize waste.

Notify Environmental Staff to ensure proper disposal.

Replace any spill kit materials used.

No

Call Emergency Coordinator (EC) at **x911** from a plant phone or **602-236-5511** from a cell phone to initiate emergency response system. Be ready to provide:

1. Location of the emergency.
 2. Size and nature of the emergency
 3. Materials/equipment involved in the incident, if known
- Evacuate immediate area and monitor from a safe distance.
Follow instruction from EC.

If **911** is called from a cell phone, immediately notify EC at **602-236-5511** afterwards.

Emergency Coordinator calls for emergency services using **x911**, designates Utility Representative (O&M Supervisor), and notifies Environmental Staff of potential reportable release.

Facility Representative determines if reportable quantity (RQ) is applicable and notifies appropriate regulatory agencies as applicable.

Quick Guide: Santan Emergency Contacts

Name	Cell Phone	Office Phone
Emergency Coordinator	--	(602) 236-5511
Plant Supervisor/Operators 24/7	--	(602) 236-5241
Plant Director	(602) 516-4908	(602) 236-5374
Sr. Environmental Scientist	(602) 842-2750	(602) 236-7029

SRP Environmental Compliance, Safety Services and Fire Protection

Name	Cell Phone	Office Phone
Corporate Sr. Environmental Scientist	(602) 809-1454	(602) 236-8077
Safety Services Representative	(928) 640-6434	(602) 236-0437
SRP Fire Marshal	(602) 390-6446	(602) 236-5578
Security Operations Center (SOC)		(602) 236-5305

HAZ MAT/Emergency Response Contractor

Name	Office Phone	24 Hr Emergency
MP Environmental Services, Inc.	(602) 278-6233	1 800-458-3036

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1.0 Site Information and Plant Certification

1.1 Purpose

This Facility Emergency Response Plan (FERP) describes response guidelines to be taken in the event of an emergency at the Salt River Project (SRP) Santan Generating Station (Santan). Emergencies may include fire, explosion, medical emergency, or release of hazardous materials including wastes which could threaten human health and/or the environment. This FERP is specific for Santan and may be implemented whenever there is an emergency as defined above. A copy of this plan will be maintained in the Santan control room and operations supervisors' office. Upon request, this FERP will be made available for review by the appropriate regulatory agencies. This plan will be updated annually or whenever there is a change in facility design, construction, operation, or maintenance policies that necessitate a revision.

Santan maintains inventories and uses hazardous materials and substances in specific quantities. Consequently, Santan is subject to the emergency planning requirements as defined in Arizona Revised Statutes 49-127. In accordance with this statute, this document fulfills the emergency response plan requirements and outlines actions that will be taken during an emergency. This plan is submitted annually to the Arizona State Emergency Response Commission (AZSERC). In addition, since Santan has the potential to generate 2,200 pounds (1,000 kilograms) of hazardous waste per month or to accumulate more than 13,227 pounds (6,000 kilograms) of hazardous waste on-site at any one time, this document also serves as the facility contingency plan as required per 40 CFR 265, Subpart D for hazardous waste handling, record keeping, disposal and spill cleanup. In addition, this document serves as the Emergency Action Plan per 29 CFR 1910.38, and Fire Prevention Plan per 29 CFR 1910.39.

1.2 Facility Information

Facility Name:	Santan Generating Station (Santan)
Location:	1005 S. Val Vista Drive Gilbert AZ 85296
County:	Maricopa
Phone Number:	(602) 236-2734
Fax Number:	(602) 236-2331
Latitude:	N 33° 19" 50'
Longitude:	W111° 44" 52'
Owner/Operator:	SRP P.O. Box 52025 Phoenix AZ 85072-2025
County:	Maricopa
Phone Number:	(602) 236-5900
SIC Code:	4911
EPA ID Number:	AZD000629493
Dunn & Bradstreet #:	0099011487

NAICS #: 221112

The Santan facility is situated in a residential / commercial area located in Gilbert, Arizona. This facility is not located on Indian lands. A vicinity/ location map is provided in Attachment No. 1.

Santan is a combined cycle electric generating facility that is wholly owned by the Salt River Project Improvement and Power District (SRP). The facility is on approximately 120 acres at the southeast corner of Warner Road and Val Vista Road. The facility consists of seven generating units: S-1, S-2, S-3, S-4, S-5A, S-5B, and S-6A and various ancillary services. The primary fuel for all units is natural gas. There is no large bulk fuel storage at the facility.

1.3 Statement of Certification

I certify that the information provided herein is accurate and complete and that provisions exist to annually update the Facility Emergency Response Plan and demonstrate the capability to execute the plan on the request of the Commission.



Barbara Sprungl, Director, Santan and Kyrene Generating Stations

3-1-2023

Date

2.0 Facility Response Roles

The Plant Director has designated Santan Emergency Coordinator (EC) responsibilities to the Control Room Operator. Santan is manned 24 hours a day, seven days a week by rotating shift personnel. A Control Room Operator will always be present on site. The EC will designate an individual to be the liaison to the responding agencies. The EC is the primary onsite coordinator during emergencies until relieved of that duty by either Plant Management or emergency responders (Police, Medical or Fire). Since the facility is manned in this manner, individual names and titles are not provided for the ECs in this plan.

Santan EC can be reached from any of the following phone numbers 24 hours a day:

Ext 6-5511 or 911	INTERNAL PHONES
(602) 236-5511	24-HOUR DEDICATED PHONE

2.1 First on Scene Responsibilities

The first on scene will assess the situation to the extent they can safely do so. If the situation involves an incidental spill or a fire in the incipient stage, then the first on scene may respond to the situation if they are trained and if this can be safely done using the protective equipment readily at hand. This could include extinguishing a small fire with a hand-held extinguisher, turning off a valve, rendering first aid, etc.

NOTE: The first on scene can only approach the incident (fire/spill/release) if the extent of the full risk posed by the incident is known and there is no danger to the first on scene.

If the incident is beyond the capacity of the first on scene to handle, the first on scene will notify the EC in the control room at **x911 using a plant phone**. If a plant phone is unavailable or there is a medical emergency, the first on scene may dial 602-236-5511 from a cell phone and contact the EC immediately after emergency services have been called.

The first on the scene should provide the following information:

- a. His/her name.
- b. Location of the emergency.
- c. The extent of any injuries or personnel involved, if known.
- d. The size and nature of the emergency.
- e. Any materials/equipment involved in the incident, if known.

The first on scene should not break communication with the EC unless directed to do so by the EC or a change in the emergency situation jeopardizes the safety of the caller.

2.2 Emergency Coordinator Responsibilities

Whenever there is an imminent or actual emergency such as an explosion, fire, medical emergency, or release of hazardous material including hazardous wastes, the EC shall:

- Evaluate the severity of the emergency.
- Dial 911 for outside emergency services if needed.

- Designate liaison if emergency services are required.
- Initiate or direct the initiation of the emergency response evacuation alarm if necessary.
- Notify Plant Management.
- Notify Power Distribution Operations (PDO) and Automatic Generation Control (AGC) if emergency involves or could involve generation assets, transmission lines or switchyard breakers.
- If hazardous material and/or wastes are involved, notify Santan Environmental Scientist (see section 4.4 for contact information).

Follow-up actions associated with the termination of an emergency response include the following:

- Assist in arranging for the proper storage and disposal of any recovered waste, contaminated soil, surface water, or any other material that results from the incident.
- Ensure that all Santan emergency response equipment is in proper condition and available for use.
- Assist in evaluating whether notification or reporting to outside regulatory agencies is required. These agencies may include the Arizona Department of Environmental Quality (ADEQ), Arizona State Emergency Response Commission (AZSERC), or the National Response Center (NRC).
- Regulatory agency notifications will be evaluated and, if necessary, will be made through either appropriate plant personnel or SRP Corporate Environmental Compliance.

2.3 Utility Representative

The Utility Representative (UR) is the on-duty Operations Shift Supervisor and is notified by the EC to interface with Command. The UR will communicate Command requests to the EC. The UR will provide Safety Data Sheets (SDS's) to Command at the Response Center.

2.4 Public Relations Officer

SRP personnel from the Media Relations department will be notified, if needed, to interface with the media.

2.5 Site Security

SRP Security will control access to the site. The entrance to the site is manned 24/7 by security personnel. The facility is surrounded entirely by wall and/or fencing, with electronic monitoring devices for breaches. Cameras are strategically placed to allow operators to see the facility from the control room and security personnel to see the facility from the guard shack. Facility lighting is sufficient for operators and security personnel to detect acts of vandalism. Only authorized personnel are permitted unescorted access to the plant.

3.0 Employee Emergency Reporting Procedures

The following instructions are used to report fire or any other type of emergency at Santan:

- Report any emergency to the EC by calling:
 - 911 from any plant phone or
 - (602) 236-5511 from a cell phone or
 - Calls from a cell phone connects directly with the local 911 operator. When using a cell phone to report an emergency, follow up contact to report the incident must be made to the EC.

Employees must be prepared to provide the following information to the EC:

- Name
- Type of incident or accident
- Extent of injuries and/or damages
- Detailed location
- Call back phone number

4.0 Evacuation Plan and Emergency Response Procedures

There is an emergency alarm for Santan Units 1 through 6. The alarms are used to signal an emergency that requires evacuation from work areas within the alarm vicinity. This emergency alarm is activated in the control room at the request of the EC. There are several area alarms within the facility that serve to alert personnel of the presence of fire or release of fire suppressant. The activation of area alarms may or may not lead to the activation of the evacuation alarm. The evacuation alarm is a series of short blasts and is audible throughout the facility.

When the evacuation alarm sounds, all personnel, with the exceptions noted below, will report to the area south of the administration building in the parking area along the fenceline. Personnel will avoid obvious hazardous areas on the way to their primary assembly area. Personnel will report to the guard shack if the assembly area cannot be reached safely. Personnel will notify the EC from the nearest phone and give their location.

Employees may be directed to relocate during any part of the emergency if it is deemed necessary to ensure the safety of the personnel. Employees will escort visitors as directed above. Visitors or contractors who may perform unsupervised work will be informed of emergency procedures prior to being left alone.

Should it become necessary to evacuate personnel off the plant site, three gates are available for exiting the site. These include the following:

- Main Gate – southwest corner of the property, exit to the access road that leads to Val Vista Drive
- South Gate – southwest corner of the property, exit to the access road that leads to Val Vista Drive
- Northeast Gate - northeast corner of the property leading to Warner Road (this exit is normally locked but can be opened at any time)

The following personnel are exempt from the evacuation procedure described above:

- The EC will remain in the control room if it is safe to do so.
- Outside operators will report to the control room, unless directed otherwise by the EC.
- If the control room is unsafe for occupancy, operating personnel will meet at the assembly area.

If safe to do so, operating personnel will ensure the Santan Visitor Logbook gets to the EC so any visitors on site can be accounted for.

The EC will designate an employee to immediately account for all visitors and personnel. The EC will notify the outside emergency responders upon arrival of any unaccounted visitors or personnel. The evacuation map is included in Attachment 2.

4.1 Medical Emergency

Outside medical assistance is called in the event of a serious or life-threatening medical emergency. The EC will be notified immediately after any 911 call. In the event of a medical emergency, personnel at Santan are instructed to reference the Quick Guide for Medical Emergency included at the beginning of this FERP.

Santan has the following training and supplies to deal with medical emergencies:

- Employees that are trained in basic first aid, Cardiopulmonary Resuscitation (CPR), and Automated External Defibrillator (AED) use.
- AEDs are in the control room and in the Mobile Maintenance Crew shop.
- First aid kits are available for initial response. These kits are in the maintenance shop, control room, tool room, weld shop, and in all plant vehicles. Extra supplies are kept in the chemical lab.
- Eyewashes/safety showers are located throughout the facility. The locations of the eyewashes/safety showers are listed on an internal inspection form maintained by Santan Operations.

SRP Approved Medical Facilities are provided in Attachment 3.

4.2 Arrangements with Emergency Responders

911 will be dialed whenever there is a fire, medical emergency, permit-required confined space rescue or release of a hazardous material that is beyond the response capability of the Santan personnel. It should be noted that Santan personnel are trained only to respond to incipient fires and incidental releases of hazardous materials. Santan personnel will take only those actions necessary to safely mitigate a release. Santan is located within the Town of Gilbert Fire Department jurisdiction who will respond when requested along with law enforcement if necessary.

4.3 Evacuation Procedures

During a facility wide evacuation, all employees and personnel are required to report to the primary assembly area. If unable to report to the primary assembly area due to unsafe conditions, it is necessary to notify the EC or employee's supervisor. When the evacuation or fire alarm activates:

- Employees should immediately proceed to the primary assembly area.
- Assist visitors and others needing assistance to the primary assembly area.
- Remain in the primary assembly area until released.
- Notify the EC of any staff who did not evacuate and where they are at on plant site.
- EC will interact with the fire and/or police personnel through the designated liaison regarding missing employees or those still located in the primary assembly area.

4.4 Facility Emergency Contacts

Santan Emergency Contacts

Name	Cell Phone	Office Phone
Emergency Coordinator	--	(602) 236-5511
Plant Supervisor/Operators 24/7	--	(602) 236-5241
Plant Director	(602) 516-4908	(602) 236-5374
Sr. Environmental Scientist	(602) 842-2750	(602) 236-7029

SRP Environmental Compliance, Safety Services and Fire Protection

Name	Cell Phone	Office Phone
Corporate Sr. Environmental Scientist	(602) 809-1454	(602) 236-8077
Safety Services Representative	(928) 640-6434	(602) 236-0437
SRP Fire Marshal	(602) 390-6446	(602) 236-5578
Security Operations Center (SOC)		(602) 236-5305

HAZ MAT/Emergency Response Contractor

Name	Office Phone	24 Hr Emergency
MP Environmental Services, Inc.	(602) 278-6233	1 800-458-3036

4.5 Community

Community notification will be done at the direction of the Gilbert Fire Department (GFD) or Gilbert Police Department (GPD).

Communication with the Community may be done with the Community Emergency Notification System (CENS) operated by the Maricopa Association of Governments (MAG). The Incident Commander (Command) will determine if CENS will be utilized.

5.0. Chemical Spill and Cleanup

The safe handling of all types of hazardous materials and waste generated by the plant is defined in Safety Data Sheets (SDS). Santan's approved chemical list and SDS's are available on-line using the Cority [link](https://srpnet.sharepoint.com/sites/Departments/safety/) (<https://srpnet.sharepoint.com/sites/Departments/safety/>) on SRP Safety Services intranet site. If a spill should occur, all safety precautions will be strictly adhered to during cleanup operations. Plant management has committed the necessary resources to respond to any emergency involving hazardous materials or wastes.

Spill response equipment is maintained at Santan for use for responding to incipient releases. Absorbent materials, PPE, drums, liners, shovels, etc. are available through the central warehouse and the maintenance warehouse for spill response. Primary storage areas are inventoried monthly to ensure adequate supplies.

Spill response equipment and materials are located in the shop areas, in the basements of the generating units, at the cooling tower chemical areas, in the clarifier area and in the steam turbine buildings. Absorbent materials may include pads and mats, socks, pillows and pans, and loose absorbents for oils, acids and bases.

In the event of a large or unmanageable spill of a hazardous material (HAZMAT) the EC will dial 911 for assistance. In addition, SRP has contracted with an outside contractor (Section 4.4) to perform hazardous material clean up. This contractor is qualified with emergency response technicians (ERT) to clean up and package spills including hazardous waste.

All materials contaminated during cleanup operations will be handled as a regulated waste, placed in the appropriate container, and disposed of in accordance with Federal/State Regulations and SRP Policies. The cleanup will be performed by qualified SRP personnel or an outside contractor.

A public notice is required when there is a release of a reportable quantity of specific hazardous substances into the environment within a 24-hour period. The material list in Attachment 4 of this plan identifies the materials which have reportable quantities (RQ). The EC will designate environmental personnel to evaluate the need and make the necessary notifications.

6.0 Emergency Response Equipment

Protective equipment, including full coveralls, goggles, face shields, boots, gloves, and respirators are available to all employees when handling hazardous materials. The following is a list of items available at the Santan Warehouses for spill kits:

Item	
Pig Pans	100oz/pan
Small Absorbent Sock	8 gal/box
Small Absorbent Sock	30 gal/box
Pigs (Oil & Chemical)	9 gal/box
Coveralls	SRP Stock
Rain Suit	SRP Stock
Overshoes	SRP Stock
Goggles	SRP Stock
Face Shield & Clip On	SRP Stock
Gloves	SRP Stock
Wipe Rags	SRP Stock
Warning Cones	SRP Stock
Safe Step	25 lbs/bag
Barrier Tape 50'	SRP Stock
5 Gallon Plastic Bucket	SRP Stock
Shovel	SRP Stock
Respirators	SRP Stock

7.0 Fire Response

Response to fire by Santan personnel is limited to incipient fires only. An incipient fire is defined as a fire which is in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers [29 CFR 1910.155(c)(26)]. 911 will be called for all fires that do not meet the definition of an incipient fire. The fire protection systems have alarms and delayed activation so employees can evacuate each area. All fire protection systems are routinely inspected and are subject to regularly scheduled preventative maintenance. Annual maintenance is provided by an independent third-party contractor.

Maintenance schedules and inspection records are kept in the maintenance files. The use of firefighting equipment requires notification to the O&M Supervisor who will provide for servicing of equipment.

The following represent the fire suppression systems in place at Santan:

A. Carbon Dioxide System (CARDOX):

- Units S1-S4
 - Gas turbine compartment
 - Load compartment
 - Accessory compartment
- Units S5A, S5B and S6A
 - Gas turbine compartment/gas fuel compartment
 - Number 2 bearing tunnel
 - Lube/hydraulic compartment

An alarm will sound 60 seconds before the carbon dioxide is released to warn employees in the area to evacuate.

B. Automatic Sprinklers:

- i. Wet pipe sprinklers:
 - Warehouse
 - North and South Maintenance Warehouse
 - Admin Building Maintenance Shop
 - Tool Room
 - Water Treatment Plant/Chemistry Lab
 - Fire Pump Building
- ii. Pre-Action sprinklers:
 - Cooling Towers 5 and 6
 - Unit 5 Steam Turbine Bearings
 - Unit 6 Steam Turbine Bearings
 - Admin Building Basement
- iii. Deluge System:
 - S1-4 Station Transformers
 - Auxiliary Transformers
 - Steam Turbine Lube Oil Tanks

- C. Aqueous Film Forming Foam (AFFF) Deluge systems:
- Unit 5 and 6 Steam Turbine Building Lube Oil Tank

D. FM200 Agent:

- Unit 5 Steam Turbine Building Electronics Room – second level
- Unit 6 Steam Turbine Building Electronics Room – ground level

E. ProInert Agent:

- Control Room
- Control Room Communications Room
- Admin Communications Room
- Control Room Basement

F. Hand-Held Fire Extinguishers:

Fire extinguishers are located throughout the plant site. Each extinguisher is labeled as to the type of fire it can extinguish. Each extinguisher has a number associated with it for the purposes of inspection and servicing. The fire extinguishers are inspected monthly for location and condition. Operations maintains a listing of fire extinguishers and their locations. Spare fire extinguishers are maintained in the tool room for fire watch duties.

7.1 Reporting a Fire

Santan personnel will only respond to incipient fires (those that can be addressed with a hand-held fire extinguisher). In the event of a non-incipient fire, personnel at Santan are

instructed to follow the emergency reporting section of this plan and reference the Quick Guide for Fire Discovery.

7.2 Fire Emergency Responder

Public fire protection is provided by Gilbert Fire Department.

7.3 Technical Rescue and EMS Responsibilities

Santan relies on the Gilbert Fire Department to perform all confined space rescue. In the event of such an emergency, personnel are instructed to dial 911.

7.4 Emergency Alarm System

Santan is equipped with an emergency notification system to alert personnel of a fire emergency.

7.5 Fire Prevention Plan Coordinator

The Fire Prevention Plan Coordinator, Salt River Project Property Loss Control Specialist, can be reached at (602) 236-5578. This person should be contacted with any questions concerning SRP Corporate policies regarding fire response.

8.0 Chemical Storage

8.1 Hazardous Waste Storage Locations

Hazardous wastes are collected and stored at the following locations:

- Central Accumulation Area – primary hazardous waste storage area for Santan. This storage area may contain full containers of hazardous waste for periods of up to 270 days. It is an enclosed metal shed that is located south of the ammonia tanks.
- Satellite Accumulation Area No. 1 – located on the north of the admin maintenance shop.
- Satellite Accumulation Area No. 2 – located in the S6 Steam Turbine Building
- Universal Waste – located in the central accumulation area, lube shop
 - Temporary universal waste collection – MMC shop, admin maintenance shop

8.2 Hazardous Materials Storage Locations

Due to the layout of the facility, hazardous materials are stored throughout the facility in various quantities. This is due to the size of the facility and the nature of the industry. However, larger volumes (non-bulk) of hazardous materials will be stored at or near the following locations:

- Warehouses and water treatment buildings
- Ammonium Hydroxide, 19% east of the Lube shop
- Chemical feed area for the Cooling Towers
- Mechanical maintenance shop areas
- Chemical treatment buildings for Units S1-4, S5 and S6.

Water treatment chemicals and process chemicals that are defined as extremely hazardous, hazardous, fire hazards, or bulk materials used on site are listed in Attachment No. 4.

Spills near the cooling tower or in the cooling tower treatment building are retained on-site due to the existing plant drainage system.

Santan is manned 24 hours per day, 7 days per week. Operators routinely inspect the premises. Plant personnel oversee all bulk chemical deliveries. Any release would be corrected in a timely manner.

8.3 AZSERC TIER II Reported Chemicals

The following represents those chemicals reported to the Arizona Emergency Response Commission (AZSERC). These chemicals are stored at Santan in excess of the threshold limit of 10,000 pounds. These chemicals are stored at the following locations:

Chemical	Storage Tank ID	Capacity (gallons)	Location
Ammonium Hydroxide (19%)	Tank A	21,450	East of the weld shop
	Tank B	21,450	
	S5 STB	330	S5 steam turbine water treatment building
	S6 STB	330	S6 steam turbine water treatment building
Diesel Fuel No. 2	Emergency Diesel Fire Pump	350	Emergency diesel fire pump building
	Emergency Storm Sump Generator	500	Cooling tower 5
	Emergency Turning Gear Generator	800	S1-4 water treatment building
	Diesel Fuel Tank	500	South of main warehouse
Ferric Sulfate	Clarifier Tanks	4,000 (x2)	Clarifier
Lead Acid (sulfuric) Batteries	NA	NA	S1-4 maintenance shop
			S1-4 battery room
			S5 steam turbine building
			S6 steam turbine building
			S5 PEECC
			S6 PEECC

			Emergency generators
			Emergency diesel fire pump building
Lubrication Oil	S1-4	3000 (x2)	S1-4 power block
	Other Power Blocks	Varies	Various power block reservoirs
	Drums/containers	Varies	Warehouse and lube shop
Phosphoric Acid	Tote	400	Cooling tower 1
	Tote	400	Cooling tower 5
	Tote	400	Cooling tower 6
Sodium Bisulfite (35-40%)	CT1	540	East of S1
	CT5	540	North of S5 steam turbine building
	CT6	540	West of S6 steam turbine building
	Tote	243	Waste water ponds (intermittent)
Sodium Hydroxide (25%)	Caustic	300	S5/6 water treatment building
Sodium Hydroxide (5%)	BT-4000 S1-4	170	S1-4 water treatment building
	BT-4000 S5	400	S5 steam turbine water treatment building
	BT-4000 S6	400	S6 steam turbine water treatment building
Sodium Hypochlorite (12.5%)	CT1	550 & 330	Cooling tower 1
	CT5	8,500	Cooling tower 5
	CT6	8,500	Cooling tower 6
	S56 WTB	7,614	S5/6 water treatment building
Sulfuric Acid (93%)	CT1	10,000	Cooling tower 1
	CT5	12,500	Cooling tower 5
	CT6	12,500	Cooling tower 6
	RO	250	S5/6 water treatment building
	Irrigation	160	Irrigation chemical skid
Transformer Oil	Transformers	120,366 (total)	Transformers and other electrical equipment throughout facility

8.4 Oil Storage

Oil storage including spill response is detailed in the Santan Spill Prevention and Response Plan.

9.0 Employee Training

All Santan employees are trained annually as to the provisions of this plan. Training consists of the following:

- Familiarization with this FERP.
- Fire extinguisher handling.
- Familiarization with the properties of the waste handled and the hazards presented at Santan.
- Introduction to correct procedures for containerization, transportation and storage of hazardous waste.

- Familiarization with any amendments to this document, including changes in the type of waste handled or equipment used and any procedural changes in waste handling.

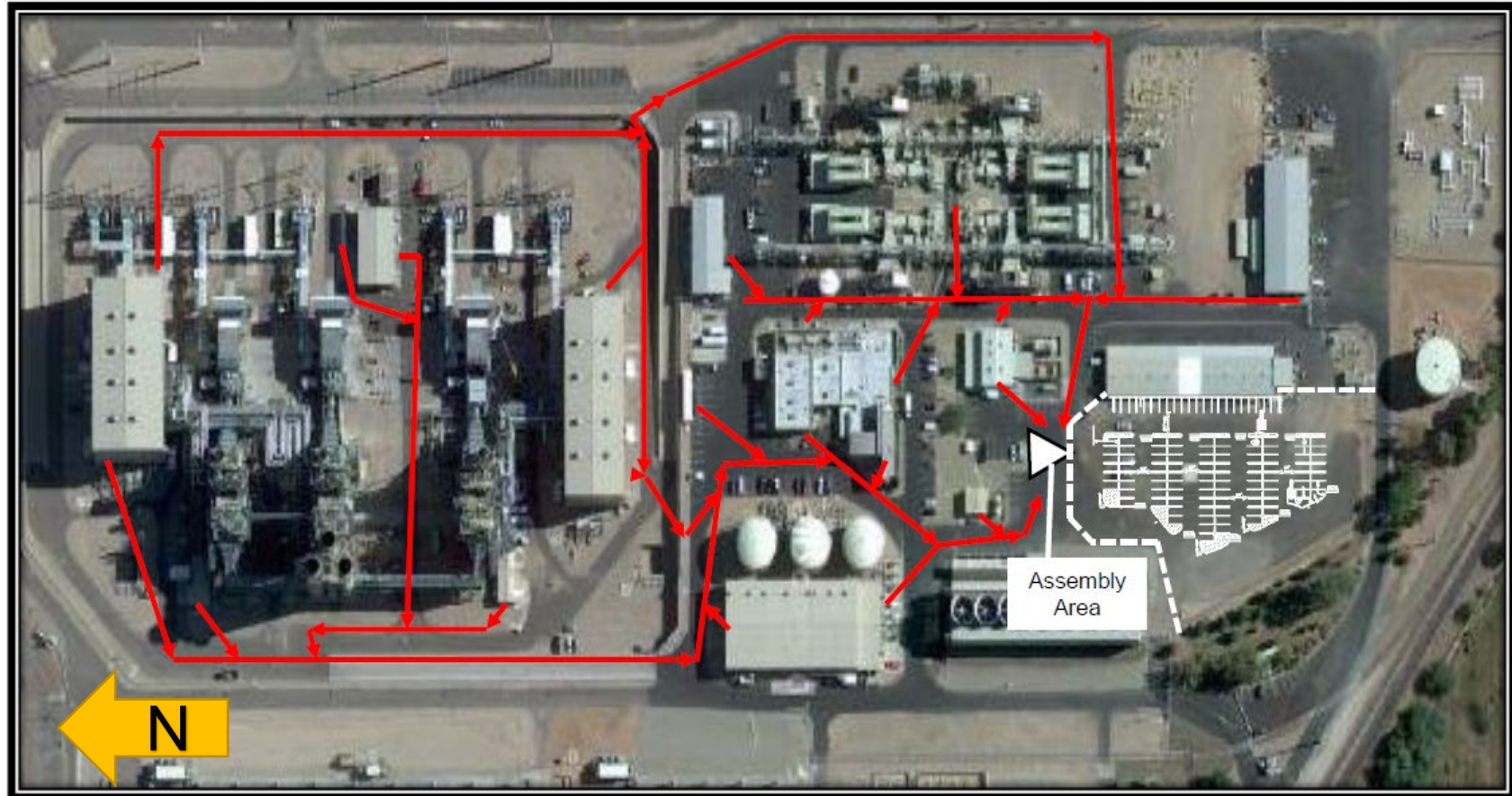
Training records are maintained online through an SRP Learning Management System (LMS). All employees who have positions that require the use of a respirator are trained in the proper selection and use of respirators and are fit tested on an annual basis. New or transferred employees will be trained within six months after the date of their employment at this facility.

ATTACHMENT 1 - Vicinity/Location Map

Santan Generating Facility
1005 S. Val Vista Drive
Gilbert, AZ 85296



ATTACHMENT 2 - Santan Evacuation Map



**Santan Generating Station
Emergency Evacuation Routes and
Assembly Area is at the Parking Lot Fence**

ATTACHMENT 3 – Emergency Medical Facilities

SRP Notice to Employees

Revised August 2020
x03-042 08/20

If you are injured while working for SRP:

Contact numbers:

*In case of a medical emergency, please call 911.

- In the Valley: Call the emergency number, ext. 6-5305, or radio PDO or ADC.
- At CGS: Call ext. 7-2222 or radio the control room for referral.

Notify your supervisor.

Notify Health Services.

- You will be referred to a company nurse to determine level of care.
- Treatment may include first aid, referral to approved occupational medical facility or emergency facility.

If referred for medical evaluation:

- Initial visit: Complete the Worker's & Physician's Report of Injury form (supplied by occupational clinic).
- Upon release to return to work, provide Health Services with a work status. The form must include physical restrictions, follow-up appointments and medications, if any.

If you do not choose to accept medical treatment provided by SRP and you seek treatment from your personal physician, you do so at your own expense. If this results in time off, it may be without workers' compensation benefits.

For more information, contact Health Services at (602) 236-5956.

Claims are administered by Sedgwick, SRP's third-party administrator. They can be reached at (480) 606-5583.

Approved Medical Facilities

Valley area locations

East

CONCENTRA — EAST MESA (480) 545-1398
1959 S. Val Vista Drive, Suite 106, Mesa, AZ 85204
Hours: M-F, 8 a.m.-6 p.m.

BANNER GATEWAY OCCUPATIONAL HEALTH (480) 543-3300
(Northeast of hospital)
1920 N. Higley Road, Suite 108, Gilbert, AZ 85234
Hours: M-F, 7 a.m.-6 p.m.

BANNER OCCUPATIONAL HEALTH (480) 827-5685
1979 W. Ray Road, Chandler, AZ 85224
Hours: M-F, 7 a.m.-6 p.m.

CONCENTRA — TEMPE (480) 968-7200
950 W. Southern Ave., Tempe, AZ 85282
Hours: M-F, 8 a.m.-5 p.m.

MEDICINE FOR BUSINESS AND INDUSTRY (MBI) (480) 629-5592
1440 S. Country Club Drive, Mesa, AZ 85210
Hours: M-F, 8 a.m.-5 p.m.

Central

BANNER PHOENIX OCCUPATIONAL HEALTH (602) 839-4456
1300 N. 12th St., Suite 520, Phoenix, AZ 85006
Hours: M-F, 6 a.m.-10 p.m.
Sat-Sun, 8 a.m.-4 p.m.

MEDICINE FOR BUSINESS AND INDUSTRY (MBI) (602) 437-0234
4013 E. Broadway Road, Suite A, Phoenix, AZ 85040
Hours: M-F, 7 a.m.-7 p.m.

Casa Grande

BANNER CASA GRANDE OCCUPATIONAL HEALTH (520) 381-6783
1676 E. McMurray Blvd., Suite 2, Casa Grande, AZ 85122
Hours: M-F, 7:30 a.m.-4 p.m.

West

BANNER ESTRELLA OCCUPATIONAL HEALTH (623) 327-4100
9305 W. Thomas Road, Suite 235, Phoenix, AZ 85037
Hours: M-F, 7 a.m.-6 p.m.

BANNER THUNDERBIRD OCCUPATIONAL HEALTH (602) 865-5618
5601 W. Eugie Ave., Suite 213, Glendale, AZ 85304
Hours: M-F, 7 a.m.-6 p.m.

MEDICINE FOR BUSINESS AND INDUSTRY (MBI) (623) 248-1950
14419 W. McDowell Road, Goodyear, AZ 85395
Hours: M-F, 8 a.m.-6 p.m.

MEDICINE FOR BUSINESS AND INDUSTRY (MBI) (602) 337-8356
15236 N. 59th Ave., Glendale, AZ 85306
Hours: M-F, 8 a.m.-5 p.m.

MEDICINE FOR BUSINESS AND INDUSTRY (MBI) (602) 272-7676
3501 W. Osborn Road, Phoenix, AZ 85019
Hours: M-F, 7 a.m.-10 p.m.; Saturday, 8 a.m.-6 p.m.

After-Hours Triage / Drug Testing

MEDICINE FOR BUSINESS AND INDUSTRY (MBI)
For after-hours injury / triage, call (602) 272-7676. An MBI triage nurse will provide the nearest available location.
Hours: M-F, 7 a.m.-10 p.m.; Saturday, 8 a.m.-6 p.m.

****Please call MBI prior to arrival.**

CONCENTRA — AIRPORT (602) 244-9500
1818 E. Sky Harbor Circle North, Suite 150, Bldg. 2, Phoenix, AZ 85034
Hours: Open 24 hours every day

See reverse side for Globe, St. Johns and Page locations.

SRP Notice to Employees

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Approved Medical Facilities Continued.

Globe Area

CANYONLANDS OCCUPATIONAL HEALTH (928) 402-0491
5860 S. Hospital Drive, Suite 102, Globe, AZ 85501
Hours: M-F, 7 a.m.-6 p.m. Closed from noon to 1 p.m. for lunch.

St. Johns Area

NORTH COUNTRY HEALTHCARE (928) 333-0127
488 S. Mountain Ave., Springerville, AZ 85938
Hours: M-F, 7:30 a.m.-6:30 p.m.

SUMMIT HEALTHCARE (928) 337-3705
625 N. 13th West, St. Johns, AZ 85936
Hours: M-F, 7 a.m.-6 p.m.

Page Area

LAKE POWELL MEDICAL CENTER (928) 645-8123
467 Vista Ave., Page, AZ 86040
Hours: M-F, 7:30 a.m.-6 p.m. (Call first.)

CANYONLANDS URGENT CARE (928) 645-1700
440 N. Navajo Drive, Page, AZ 86040
Hours: M-Sat, 7 a.m.-7 p.m.

ATTACHMENT 4 – Hazardous Materials Listing

Santan Hazardous Material List

Material	Size	Location	Containment	Hazard Category
Ammonium Hydroxide, 19% (Agua Ammonia) <ul style="list-style-type: none"> CAS 1336-21-6 RQ 1,000 LB ammonium hydroxide (666 gallons of 19% solution) UN 2672 	Two 21,450-gallon steel tanks	East of Weld Shop	ISC: 35,193 gallons	Corrosive Liquid NFPA: 3,1,0 ERG# 154
	330-gallon poly tote	S5 Steam Turbine WTB	ISC: 541 gallons	
	330-gallon poly tote	S6 Steam Turbine WTB	ISC: 541 gallons	
Sulfuric Acid, 93% <ul style="list-style-type: none"> CAS 7664-93-9 RQ: 1,000 LB sulfuric acid (64 gallons acid) RCRA D002 UN 1830 <p>*CT6 sulfuric acid tank is managed to artificial target capacity of 7,702 gallons of sulfuric acid.</p>	10,000-gallon tank	CT1	ISC: 14,143 gallons	Corrosive Water Reactive NFPA: 3,0,2, W ERG # 137
	250-gallon poly tank	S5/6 WTB	Inside with ISC: 639 gallons	
	12,500-gallon steel tank	CT5	ISC: 14,521 gallons	
	12,500-gallon steel tank	CT6	ISC: 8,473 gallons (110% effective containment) *	
	160-gallon poly tank	Irrigation skid at the South Raw Water Tank	ISC: Double-walled tank	
Multi-Chlor (sodium hypochlorite 12.5%, bleach) <ul style="list-style-type: none"> CAS 7681-52-9 RQ: 1,000 LB sodium hypochlorite (100 gallons bleach) UN 1791 	550-gallon poly tank	CT1	Double-walled tank inside, 110% secondary containment 633 gallons	Oxidizer NFPA: 2,0,0, OXY ERG # 154
	330-gallon poly tote	CT1	ISC	
	7,614-gallon FRP tank,	S5/6 WTB	Inside with ISC: 12,454 gallons	
	8,500-gallon FRP tank,	CT5	Covered ISC: 11,500 gallons	
	8,500-gallon FRP tank	CT6	Covered ISC: 10,705 gallons	
Ferric Sulfate, 50% <ul style="list-style-type: none"> CAS 10028-22-5 RQ: 2,000 lb. (for product) UN 3264 Acidic, Inorganic, N.O.S. 	Two 4,000-gallon FRP tanks, interconnected through common drain	Clarifier	Covered ISC: 9,312 gallons	Corrosive Liquid NFPA: 2,0,0 ERG# 154

Santan Hazardous Material List

Material	Size	Location	Containment	Hazard Category
Magnafloc LT25 (Flocculation agent, polyacrylamide, anionic) <ul style="list-style-type: none"> CAS 9003-05-8 No RQ Not regulated by DOT 	1-3 pallets, 36 bags per pallet, 55 lbs./bag	Clarifier	Solid material, plant drainage	NFPA: 0,1,0
Nalco PD9604 (Hydrotreated heavy paraffinic distillate) <ul style="list-style-type: none"> CAS 64742-54-7 No RQ Not regulated by DOT 	400-gallon SS totes	CT5 & CT6	ISC	NFPA: 0,1,0
	201-gallon IBC (intermittent)	S56 WTB		
Sodium Bisulfite, 40% <ul style="list-style-type: none"> CAS 7631-90-5 RQ: 5,000 LB sodium bisulfite (1,111 gallons solution) UN 2693 	540-gallon double-walled poly tank	East of S1	Double-walled tank outside	Corrosive NFPA: 2,1,0 ERG # 154
	540-gallon double-walled poly tank	North of S5 STB		
	540-gallon double-walled poly tank	West of S6 STB		
	243-gallon IBC (intermittent)	Waste water ponds	Outside, uncovered Secondary Containment	
Soda Ash (sodium carbonate) <ul style="list-style-type: none"> CAS 497-19-8 No RQ 	50-pound bag	S5/6 WTB	N/A	Irritant
Phosphoric Acid, 75% <ul style="list-style-type: none"> CAS 7664-38-2 RQ: 5,000 LB acid (370 gallons solution) UN 1805 	400-gallon poly tank	CT1	Outside, uncovered Secondary Containment	Corrosive NFPA: 3,0,0 ERG# 154
	400-gallon poly tank	CT5		
	400-gallon poly tank	CT6		
Nalco 3D Trasar 3DT487 (Phosphoric acid, 5-10%) <ul style="list-style-type: none"> CAS 7664-38-2 RQ: 4,900 gallons (based on 5%) Not regulated by DOT 	400-gallon SS tote tank	CT1	Outside, uncovered Secondary Containment	NFPA: 1,1,0
	400-gallon SS tote tank	CT5		
	400-gallon SS tote tank	CT6		
	270-gallon IBCs (intermittent)	S5/6 WTB	Plant drainage	

Santan Hazardous Material List

Material	Size	Location	Containment	Hazard Category
Nalco 3D Trasar 3DT199 (Sodium benzotriazole, 30-60%) <ul style="list-style-type: none"> CAS 15217-42-2 No RQ UN 1719 	400-gallon SS tote	CT1	Outside, uncovered Secondary Containment	Corrosive Liquid NFPA: 2,0,0 ERG# 154
Nalco BT-4000 (sodium hydroxide, 1-5%) <ul style="list-style-type: none"> CAS 1310-73-2 RQ: 1,000 LBS RCRA D002 UN 1824 	170-gallon poly double-walled tank	S1-4 WTB	Inside, contained within building	Corrosive NFPA 3,0,0 ERG #154
	400-gallon SS totes	S5 & S6 Steam Turbine WTB	Secondary containment	
Nalco Elimin-Ox (carbohydrazide, 5-10%) <ul style="list-style-type: none"> CAS 497-18-7 No RQ UN 3264 	160-gallon poly double-walled tank	S1-4 WTB	Inside, contained within building	Corrosive NFPA: 0,0,0
	55-gallon drums			
Nalco 352 (morpholine, 40-70%) <ul style="list-style-type: none"> CAS 110-91-8 No RQ Not regulated by DOT 	160-gallon poly double-walled tank	S1-4 WTB	Inside, contained within building	Corrosive NFPA: 2,1,0
	55-gallon poly drums			
Sodium Hydroxide, 25- 50% (caustic) <ul style="list-style-type: none"> CAS 1310-73-2 RQ: 1,000 LB sodium hydroxide (800 gallons solution) UN 1824 	300-gallon poly tank	Inside S5/6 WTB	Secondary Containment	Corrosive NFPA: 3,0,1 ERG# 154
Vitec 3000 <ul style="list-style-type: none"> No RQ Not regulated by DOT 	240-gallon IBC	S5/6 WTB	Secondary Containment	NFPA: 2,0,0
	35-gallon poly tank	S1-4 WTB		
	55-gallon poly tank	S1-4 WTB		
RoClean P112 <ul style="list-style-type: none"> No RQ UN 3236 	350 lb. fiber drum (solid)	S5/6 WTB	Inside, contained within building	Corrosive NFPA: 3,0,0 ERG# 154
RoClean L403 <ul style="list-style-type: none"> No RQ Not regulated by DOT 	55-gallon poly drum	S5/6 WTB	Inside, contained within building	Corrosive NFPA: 2,0,0 ERG# 154
Sodium metabisulfite, solid <ul style="list-style-type: none"> CAS 7681-57-4 No RQ Not regulated by DOT 	50 lb. bags	S5/6 WTB	Inside, contained within building	NFPA: 2,0,1 ERG# 154

Santan Hazardous Material List

Material	Size	Location	Containment	Hazard Category
Citric Acid, anhydrous <ul style="list-style-type: none"> CAS 77-92-9 No RQ Not regulated by DOT 	50 lb. bags	S5/6 WTB	Inside, contained within building	NFPA: 1,1,0 ERG# 140
Nalco 7330 (magnesium nitrate, 1-5%) <ul style="list-style-type: none"> CAS 10377-60-3 (Cupric Nitrate Trihydrate) CAS 10031-43-3 CERCLA RQ: 100 LBS (10,000 LBS solution) UN 3265 	5-gallon poly pail	S5/6 WTB	Inside, contained within building	NFPA: 3,1,0 ERG# 153
Nalco H-550 Microbicide <ul style="list-style-type: none"> CAS 111-30-8 UN 3265 	5-gallon poly pail	S5/6 WTB	Inside, contained within building	NFPA: 3,1,0 ERG# 153
Trac- 114 Plus <ul style="list-style-type: none"> CAS 1310-73-2, 1330-43-4 RQ: 24,700 lbs. product UN 1824 	5-gallon poly pail	S5/6 WTB	Inside, contained within building	Corrosive NFPA: 3,0,0 ERG# 154
Simple Green <ul style="list-style-type: none"> CAS 68439-46-3 No RQ Not regulated by DOT 	55-gallon poly drum	Steam Wash Station	Covered, Secondary Containment	NFPA: 1,0,0
Acetylene, compressed gas <ul style="list-style-type: none"> CAS 74-86-2 No RQ UN 1001 	255 CF cylinders (17.6lbs ea.)	Warehouse, Weld Shop	Properly secured & segregated	Compressed gas Flammable NFPA: 1,4,3 ERG# 116
Carbon dioxide, compressed gas <ul style="list-style-type: none"> CAS 124-38-9 No RQ UN 1013 	Fire suppression reservoirs 2 @ 3 ton (684 lb. ea.)	Units 2 & 3	Properly secured & segregated	Compressed gas NFPA: 1,0,0 ERG# 120
	Fire suppression reservoir-3 @ 6 ton (1373 lb. ea.)	Units 5A, 5B, & 6A		
	280 CF cylinders (32 lb. ea.)	Warehouse, Weld Shop		
	16 Packs (512 lb. ea.)	North of Unit 1 HRSG		

Santan Hazardous Material List

Material	Size	Location	Containment	Hazard Category
Oxygen, compressed gas <ul style="list-style-type: none"> CAS 7782-44-7 No RQ UN 1072 	281 CF cylinders (23.3 lb. ea.)	Warehouse, Weld Shop	Properly secured & segregated	Compressed gas Oxidizer NFPA: 3,0,1 ERG# 122
Nitrogen, compressed gas <ul style="list-style-type: none"> CAS 7727-37-9 No RQ UN 1066 	255 CF cylinders (18.5 lb. ea.)	Warehouse	Properly secured & segregated	Compressed gas NFPA: 3,0,1 ERG# 121
	Trailer (3622 lb.) (Intermittent)	By Lube Shop		
	16 Packs (296 lb. ea.)	North of Unit 1 HRSG and one near each S1-4 HRSG		
Hydrogen, compressed gas <ul style="list-style-type: none"> CAS 1333-74-0 No RQ UN 1049 	16 Packs (16.4 lb. ea.)	North of Unit 1 HRSG	Properly secured & segregated	Compressed gas Flammable gas ERG# 115 NFPA: 1,4,0
	Trailer (708 lb.)	West of Lube Shop		
Methane, compressed gas <ul style="list-style-type: none"> CAS 74-82-8 No RQ UN 1971 	255 CF cylinders (18.5 lb. ea.)	Warehouse	Properly secured & segregated	Compressed gas Flammable gas ERG# 115 NFPA: 1,4,0
Lead Acid Batteries (Sulfuric acid, Lead) <ul style="list-style-type: none"> CAS 7664-93-9, 7439-92-1 No RQ UN 2796 	8 batteries (134 lb. acid)	S1-4 Maintenance Shop	Enclosed & vented with secondary containment	Corrosive Water Reactive Hydrogen gas NFPA: 3,1,2, W ERG# 157
	272 batteries (8517 lb. acid)	S1-4 Battery Room		
	120 batteries (9516 lb. acid)	S-5 STB		
	60 batteries (5809 lb. acid)	S-6 STB		
	174 batteries (58 per PEECC) (6903 lb. acid)	S5 PEECC S6 PEECC		
	Various small batteries	Emergency generator housings, emergency diesel fire pump building.		

Santan Hazardous Material List

Material	Size	Location	Containment	Hazard Category
Diesel fuel no. 2 <ul style="list-style-type: none"> CAS 68476-34-6 No RQ NA 1993 	500-gallon steel tank	South of main warehouse	Covered ISC	Combustible Liquid NFPA: 1,2,0
	500-gallon steel tank	Emergency Storm Sump Generator; CT5	Inside double-walled tank	
	800-gallon steel tank	Emergency Turning Gear Generator; S1-4 WTB	Inside double-walled tank	
	350-gallon steel tank	Emergency Diesel Fire Pump Building	Inside double-walled tank	
Unleaded Fuel <ul style="list-style-type: none"> CAS 86290-81-5 No RQ UN 1203 	500-gallon steel tank	Vehicle Fueling Tank	Covered ISC	Combustible Liquid NFPA: 1,3,0
Lubricating Oil (Chevron GST 32, Mobile DTE 724, etc.) <ul style="list-style-type: none"> CAS 64742-54-7 No RQ Not regulated by DOT 	55-gallon drums up to 6,500 gallons reservoirs	S1-4 power block, various power block reservoirs, drums/containers facility wide	Varies	NFPA: 0,1,0
Mineral Oil <ul style="list-style-type: none"> CAS 8042-47-5 No RQ Not regulated by DOT 	Stored in various transformers, OCBs and MCCs throughout the plant	Facility wide	Varies	Combustible Liquid NFPA: 0,1,0
Envirotemp FR3 Fluid (Vegetable Oil) <ul style="list-style-type: none"> CAS 68334-28-1 No RQ Not regulated by DOT 	Stored in the MCCs used for Units 5-6	Pit Units	Varies	NFPA: 0,1,0
EcoSafe® EHC-46 (Polyether Polyol lubricant) <ul style="list-style-type: none"> CAS 9003-11-6 No RQ Not regulated by DOT 	230-gallon reservoir	S6 STB	Enclosed	NFPA: 1,1,0
Fyrquel (Phosphate Ester) <ul style="list-style-type: none"> CAS 68511-37-5 No RQ UN 3082 	55-gallon steel drums	Warehouse	Enclosed	NFPA: 2,1,0 ERG# 171

Santan Hazardous Material List

Material	Size	Location	Containment	Hazard Category
FM-200 Heptafluoropropane Compressed Gas, 2.2 <ul style="list-style-type: none"> • CAS 431-89-0 • No RQ • UN3296 	457 lb. cylinders	S5 & S6 STB	Enclosed	NFPA 1,0,0 ERG# 126
Pro-Inert IG-55 Nitrogen/Argon Mixture Compressed Gas, 2.2 <ul style="list-style-type: none"> • CAS 7440-37-1 • No RQ • UN1956 	39 cylinders @ 300.7 lbs. ea.	Admin Bldg. Basement	Enclosed	NFPA 1,0,0 ERG# 126
Aerosol paints/Solvents Pressurized containers <ul style="list-style-type: none"> • CAS number varies • RQ dependent on product • UN 1950 	12-17 oz cans	Warehouse, S1-4 Maintenance Shop, S5-6 Maintenance Shop	Enclosed	Flammable NFPA 2,3,0 ERG# 126

Acronyms

CAS – Chemical Abstracts Service

CT – Cooling Tower

DOT – Department of Transportation

ISC – Impervious Secondary Containment

ERG – Emergency Response Guidebook

MCC – Motor Control Center

NFPA – National Fire Protection Association

PEECC – Packaged Electrical Equipment Control Cab

RCRA – Resource and Conservation Recovery Act

RQ – Reportable Quantity, amount designated by EPA to trigger release notifications

SPCC – Spill Prevention Control and Countermeasures

UN – United Nations chemical ID number used by DOT

WTB – Water Treatment Building

