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May 22, 2015
(Revised June 1, 2015)
(Revised June 2, 2015)
(Revised July 2, 2015)
(Revised July 10, 2015)

2013-2993-15

Wayne Lorentzen, P.E.
California Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826-3200

RE: Shipment Plan
Blast Furnace Feed Room
Exide Technologies, Vernon, California

Dear Mr. Lorentzen:

Enclosed please find Exide Technologies' Shipment Plan for off-site shipment of material currently located within the Blast Furnace Feed Room Containment Building at the Exide facility in Vernon, California. Attachment I of this plan was revised June 1 and 2, 2015 to reflect AQMD comments received May 31, 2015 and June 1, 2015. Attachments H and I of this plan were revised July 2, 2015 to identify the receiving facility for tin and antimony drosses and to provide a mitigation plan for drosses and plate shipment. Table 1 was also revised to provide shipment status and schedule. In the July 10, 2015 version, the schedule and receiving facilities were updated.

There is approximately 2,900 tons of material stockpiled in the Blast Furnace Feed Room. The material will be placed into end dump trailers or drums and transported to off-site recycling and disposal facilities. The Blast Feed Room contents, transport method, truck quantities and intended receiving facility are summarized in Table 1.

SHIPMENT STATUS

As of July 9, 2015, shipment of truck/trailers occurred June 3 to June 8, 2015 and July 6 to 7, 2015. The status of shipment is provided in Table 1.

PREPARATION ACTIVITIES

Mitigation plans for shipment of Blast Feed Room material (Reverb Slag and Cast Iron, Tin and Antimony Drosses) was approved by AQMD on May 31, 2015. A mitigation plan for shipment of Blast Feed Room material (Limerock and Coke) was approved by AQMD on June 3, 2015. A mitigation plan for shipment of Blast Feed Room material (Drosses and Plates) was submitted to AQMD on June 26, 2015. Approval has not yet been received.

Work will be conducted in accordance with the facility's NESHAP Compliance Plan for Fugitive Sources. A copy of the plan is provided in Attachment A and was previously submitted as Appendix DD of the August 4, 2014 RCRA Part B Permit application.

Material handling and loading will be performed by facility personnel using facility equipment with possible support from contractors. Health and safety will be conducted in accordance with the facility's Injury and Illness Prevention Plan (Attachment B).

Spill prevention and control will be conducted in accordance with the facility's May 2015 Crisis Management Plan/Contingency Plan which was submitted to DTSC as Appendix R of the August 15, 2015 Closure Plan and Spill Prevention Control and Countermeasures Plan which was submitted to DTSC as Appendix S of the August 15, 2015 Closure Plan. These documents are provided as Attachment C and D, respectively. Spill control measures for leaks and solid spills are provided in the Crisis Management Plan / Contingency Plan Response Guide 3E (General Liquid Spills) and Response Guide 3B (Caustic Solids Spill), respectively.

LOADING AND SHIPMENT

Material loading and shipment procedures are provided in the plans provided in Attachment I.

SCHEDULE AND SEQUENCE

This plan will be implemented following approval by DTSC and AQMD. Exide will then resume loading trailers for shipment. Depending on the availability of the receiving facility, end dump trailers can be loaded up to approximately 7 trailers per day. The manual drum filling will occur during a time such that it does not cause congestion within the feed room. The material stockpiles are close to each other in the feed room and personnel safety may make it necessary to fill the drums during a different time of day than the end dump trailer loading.

As it was previously approved in the June 2, 2015 Blast Feed Shipment Plan, drum filling will continue while awaiting DTSC and AQMD approval to resume shipment.

Proposed transportation routes are provided in Attachment H. The number of trucks expected for each material and receiving facility is summarized in Table 1.

Loading and shipment is expected to resume as shown on the attached schedule. Truck/trailer loading and shipping will occur Monday through Friday, 5 a.m. to 5 p.m. Shipment is expected to occur per the schedule on Table 1.

Drum filling will occur Monday through Friday 5 p.m. to 5 a.m. Drum filling is expected to occur per the schedule on Table 1. Drums will be palletized and loaded into shipment vehicles Monday through Friday 5 a.m. to 5 p.m. Shipment is expected to occur per the schedule on Table 1.

Please note that the schedule in Table 1 is dependent on AQMD and DTSC approval, and approval to receive by the receiving facility.

Approvals from receiving facilities to receive materials will be provided in Attachment J. The paperwork will be provided when available.

Please contact John Hogarth at Exide (323) 262-1101 x 275 or Jen DiJoseph at Advanced GeoServices at (610) 840-9189 with any questions.

Sincerely,

ADVANCED GEOSERVICES

Jennifer W. DiJoseph
Project Consultant

Paul G. Stratman, P.E.
Consultant

REGISTERED PROFESSIONAL ENGINEER
PAUL GERARD STRATMAN
NO. C61595
EXP. 6/30/17
CIVIL
STATE OF CALIFORNIA

7/10

JWD:PGS:kk

Enclosure

cc: M. Nazemi
T. Strang
J. Hogarth
D. Henke
N. Serieys

Exide Technologies submits the enclosed certification per CCR Title 22 Section 66270.11(b) and (d) for the May 22, 2015 Shipment Plan for the Blast Furnace Feed Room at Exide's Vernon, California facility.

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to be the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Hogarth

Name: JOHN S. HOGARTH

Company: EXIDE TECHNOLOGIES

Title: PLANT MANAGER

TABLE

TABLE 1
BLAST FEED ROOM MATERIAL SUMMARY
EXIDE TECHNOLOGIES, VERNON, CALIFORNIA

Material	Quantity (lbs)	Shipping Method	Classification	Waste Code	Receiving Facility	Method	Estimated Number of Trucks	Note	Status 7/9/2015	Approximate Schedule for Remaining Material[1]
Dross & Plates - Blast Feed	2,520,000	Truck/Trailer	RCRA Hazardous Waste	D006, D008, 181	Exide Muncie, IN	Recycling	60	From Refining Kettles, lead plates	none	July 6 - August 5, 2015
					Doe Run, Boss, MO	Recycling			none	
Reverb Slag	1,512,000	Truck/Trailer	RCRA Hazardous Waste	D006, D008, 181	Exide Muncie, IN	Recycling	36	From Reverb furnace	13 loads shipped, <24 loads remaining	July 6 - July 10, 2015
Blast Slag (will be mixed with Reverb Slag)	1,000	Truck/Trailer	RCRA Hazardous Waste	D006, D008, 181	Exide Muncie, IN	Recycling		Currently goes to La Paz for disposal	shipped with Reverb Slag	July 6 - July 10, 2015
Cast Iron	499,408	Truck/Trailer	RCRA Hazardous Waste	D008, 181	Exide Muncie, IN	Recycling	12	To be recycled - contaminated	not shipped	August 3 - August 14, 2015
					US Ecology	Disposal				
Tin Dross (Sn)	798,000	Drum	Non-RCRA Calif Hazardous Waste	181	Conecsus, Terrell, TX	Recycling	19	From Refining pots - to be recycled	Loading in progress; 2 loads shipped	Loading July 1 - July 21, 2015; shipment by July 31, 2015
					Exide Muncie, IN					
					Doe Run, Boss, MO					
Antimony Dross (Sb)	346,500	Drum	Non-RCRA Calif Hazardous Waste	181	Conecsus, Terrell, TX	Recycling	8	From Refining pots - to be recycled	not drummed or shipped	Loading July 22 - August 5, 2015; shipment by August 7, 2015
					Exide Muncie, IN					
					Doe Run, Boss, MO					
Lime Rock	70,560	Truck/Trailer	RCRA Hazardous Waste	D008, 181	US Ecology	Disposal	2	Disposal	all material shipped, 3 loads	complete
Blast Coke (Floor)	38,448	Truck/Trailer	RCRA Hazardous Waste	D008, 181	US Ecology.	Disposal	2	Disposal		complete
	5,785,916						**139**			

Tin Dross	798,000
Antimony Dross	346,500
Dross Weight per Drum	800
Drums Needed for Sn Dross	998
Drums Needed for Sb Dross	433
Total Number of Drums	1,431

Drums per Pallet	4
Pallets per Truck	13
Drums per Truck	52
Total weight per Truck	41,600

NOTES:
1. Schedule assumes material is accepted by Doe Run. Schedule is dependent on DTSC and AQMD approval.

ATTACHMENT A

Standard Operating Procedures

NESHAP Compliance Plan for Fugitive Sources

Prepared for:
EXIDE Technologies
Vernon, California

Prepared by:
ENVIRON International Corporation
Irvine, California

Date:
June 2008

Project or Version Number:
07-20431A

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1 Standards for Fugitive Sources NESHAP Compliance

This manual describes fugitive dust emission control Standard Operating Procedures (SOPs) as required to demonstrate compliance with 40 CFR 63 Subpart X, National Emission Standards for Hazardous Air Pollutants (NESHAP) from Secondary Lead Smelting. This SOP manual satisfies the requirements of 40 CFR 63.545(a).

Table 1 below presents the regulated NESHAP fugitive sources as they pertain to Exide Technologies (Exide) plant located at Vernon, California.

Table 1: Regulated Fugitive Sources at Exide Technologies Vernon

Regulated NESHAP Fugitive Source		Plant Locations	Compliance Measures (all require recordkeeping)
Plant Roadways		All plant roadways including all vehicular and foot traffic areas.	Sweeping three times every calendar day, Sunday through Saturday, with each routine sweeping event occurring at least once per operating shift.
Battery Breaker Area (RMPS)		Interior and Exterior Areas and Surfaces	Washing the entire area with water each shift that the hammer mill (Device D1) is operated, with each cleaning being not less than four (4) hours apart or all the exterior areas and surfaces may be cleaned using either a certified sweeper pursuant to SCAQMD Rule 1186 or a permitted HEPA vacuum having a minimum efficiency guaranteed by the manufacturer of 99.97 percent on 0.3 micron size particles
Smelter Area	Furnace Area	Vehicle Exits	Vehicle wash stations at each exit of the Smelter Area
	Refining and Casting Area	Vehicle Exits	Vehicle wash stations at each exit of the Refining and Casting Area
	Material Storage and Handling Areas	Plant Scrap Storage area, Blast Furnace Feed Room, Reverb slag and kettle dross handling area, vehicle exits.	Vehicle wash stations at each exit of the Material Storage and Handling Areas

The sections below will discuss in detail the measures used to control fugitive emissions from the sources mentioned above. The sections will also discuss the minimum requirements and will provide the compliance measures in accordance with the Rule 1420 compliance plan (Rule 1420 plan) approved by the South Coast Air Quality Management District (SCAQMD).

2 Plant Roadways (Including Plant adjacent public sidewalks and roadways)

This section discusses the control measures to be adopted for all Plant roadways including all vehicular and foot traffic areas and plant adjacent public sidewalks and roadways.

Minimum requirements: The SOP for Plant Roadways requires paving of all areas subject to vehicle traffic and pavement cleaning twice per day except on days when natural precipitation makes cleaning unnecessary. However, the Rule 1420 plan requires that all concrete, asphalted areas, and plant roadways of the Exide Technologies property, as well as facility adjacent sidewalks be routinely swept three times every calendar day, Sunday through Saturday. Each routine sweeping event shall occur at least once per operating shift and each sweeping event shall be not less than four (4) hours apart.

Compliance plan: Exide will routinely sweep three times every calendar day, Sunday through Saturday, all concrete, asphalted areas, and plant roadways of the Exide property, as well as facility adjacent sidewalks as per Condition no. 8 of the Rule 1420 plan. Each routine sweeping event will occur at least once per operating shift and each sweeping event will be not less than four (4) hours apart. As stated in Condition 8 of the Rule 1420 plan, Exide will meet with the proper authorities in the City of Vernon to discuss the possibilities of sweeping city roadways, including but not limited to portions of 26th Street and Indiana Street and will notify SCAQMD 3 working days in advance of these meetings. In addition to the three routine sweeping events specified above, Exide will sweep as necessary any areas of concrete, asphalted areas, and plant roadways of the Exide Technologies property where accidents, mishaps and/or process upsets result in deposition of lead bearing material and/or dust. Exide will not be required to comply with Condition no. 8 of the Rule 1420 plan on rainy days for both routine and non-routine sweeping events.

Exide will deploy a mobile sweeper that is PM10-compliant pursuant to SCAQMD Rule 1186 to carry out the sweeping activities. The mobile sweeper will be maintained and operated in accordance with all manufacturer specifications. Any mechanical malfunctions of the sweeper that either precludes or prevents its operation will be immediately reported to the AQMD at 1.800.CUT.SMOG and reported as a breakdown pursuant to AQMD Rule 430 – Breakdown Provisions. If the sweeper is not repaired within 3 calendar days of a reported breakdown, the Executive Officer of SCAQMD will be notified and an alternate sweeper meeting the operating criteria and capabilities in Condition No. 7 of the Rule 1420 plan will be placed on site and immediately operated by Exide.

A daily log, Log Sheet 1: Plant Roadway Cleaning Record, must be kept to include the following data:

- Date
- Cleaner
- Time of cleaning

- Area cleaned
- Reason for not cleaning (The only acceptable reason is the presence of rain, snow, or ice.)

3 RMPS Area (Battery Breaker Area)

The Raw Material Preparation System (RMPS) is the Battery Breaker Area of the facility and is located in the north end of a building shared with the reverberatory furnace feed room. Fugitive dust control requirements for this area are as follows:

Minimum Requirements: Partial enclosure and pavement cleaning twice a day or total enclosure of the Battery Breaking Area. The Rule 1420 plan requires that either interior and exterior areas and surfaces of the Raw Materials Preparation Storage System (Battery Breaker Area) shall be completely and entirely washed down with water each shift that the hammer mill (Device D1) is operated, or all external areas be cleaned by a sweeper compliant with SCAQMD Rule 1186.

Compliance Recommendations: Compliance with the fugitive dust standard for this area cannot be currently met by the method of total enclosure of the area in a structure meeting the requirements of 40 CFR 265.1101(a)(I). (a)(2)(i). and (c)(l)(i). This is due to the open sides on the west wall of the building.

As a result, partial enclosure, wet suppression to prevent dust, and pavement cleaning is the alternate method of compliance. As per Condition no. 9 of the Rule 1420 plan, Exide will completely and entirely wash down the interior and exterior areas and surfaces of the Raw Materials Preparation Storage Area (Battery Breaker Area) with water, in each shift that the hammer mill (Device Dl) is operated, with each cleaning being not less than four (4) hours apart. All liquids and runoff from the washing down of exterior areas and surfaces shall be discharged into Exide Technologies' storm water retention pond. Alternatively, in lieu of washing down the exterior areas and surfaces with water, the exterior areas and surfaces Exide may clean using either a certified sweeper pursuant to Condition No. 7 of the Rule 1420 Plan or an AQMD permitted HEPA vacuum having a minimum efficiency guaranteed by the manufacturer of 99.97 percent on 0.3 micron size particles. Exide will either use one or a combination of both the options to comply. Each cleaning activity will not be less than 4 hours apart and all liquids and runoff from the washing down of exterior areas and surfaces will be discharged into Exide storm water retention pond. A daily log, Log Sheet 2: RMPS Floor & Trailer Area Cleaning Record, will be kept to include the following data:

- Date
- Cleaner
- Time of cleaning
- Reason for not cleaning
- Supervisor's signature

4 Furnace Area, Refining and Casting Area, and Material Storage Handling

The Reverb and Blast Furnace Area, the Refining Area, and the Material Storage and Handling Area for the Reverb Furnace slag and Refining drosses all share the same enclosure at the facility, and these areas each have separate requirements. The strictest requirements are to meet the requirements applicable to the Material Storage and Handling Area; therefore, the entire enclosure must meet the requirements applicable to Material Storage and Handling. Each of the area's individual requirements are discussed separately in Sections 4.1, 4.2, and 4.3. When referring to the Furnace Area, Refining and Casting Area, and Material Storage Handling together, the term *Smelter Area* is used.

4.1 Furnace Area

The Furnace Area comprises the areas around the Reverb and Blast Furnaces.

Minimum Requirements: Partial enclosure and pavement cleaning twice a day or total enclosure in a structure meeting the requirements of 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(1)(i), and ventilation of the enclosure to a control a device.

Compliance Considerations: Two options exist; both are provided to assist the reviewer. Exide has chosen one out of the two options; the option Exide has chosen to follow is indicated accordingly.

Option I: As the Smelter Building does meet the requirements of a partial enclosure, cleaning of the building area floor around the furnaces twice a day with a small vacuum/sweeper type unit may provide a simple way to comply with this SOP.

> ***Compliance Recommendations for Option I:*** Records of the cleaning would be kept, and the compliance would be achieved.

Option 2: Exide has chosen to follow this option. The alternative is to ensure that the Smelter Building complies with the requirements of 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(1)(i) and ventilation of the building is routed through a control device which then meets the 2.0 mg/dscm maximum lead emission concentration.

> ***Compliance Recommendations for Option 2:*** 40 CFR 265.1101(a)(1), (a)(2)(i) and (c)(1)(i) apply to the design and operating standards for a containment building, regulated under RCRA. The specific portions of these requirements are as follows:
>
> - The building must be totally enclosed to protect from precipitation, wind, and run-on and assure containment of managed wastes.
>
> - Take measures to prevent tracking of hazardous waste out of the unit by equipment used to handle the waste. An area must be designated as a vehicle wash and any rinsate must be collected and properly managed.

- Take measures to control fugitive dust emissions such that any openings exhibit no visible emissions.

- All associated particulate collection devices must be operated and maintained with sound air pollution control practices. The state of no visible emissions must be maintained effectively at all times during normal operating conditions including when employees and vehicles are entering and exiting the unit.

- As the containment building coupled with a control device operation is used for compliance with the Furnace Area SOP, then a vehicle wash area will be required at all building doorways that allow mobile equipment to exit the building.

A record will be kept of all vehicle washing on a daily basis(see Section 4.3). Details regarding compliance with the total enclosure requirements are presented below.

4.2 Refining and Casting Area

Minimum Requirements: Partial enclosure and pavement cleaning twice a day or total enclosure in a structure meeting the requirements of 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(1)(i) and ventilation of the enclosure to a control device. Condition no. 16 of the Rule 1420 plan requires that all fugitive emissions from the smelter/refining building be generated within a total enclosure subject to general ventilation that maintains the enclosure at a lower than ambient pressure to ensure in-draft through any and all doorways, windows, passages or openings of the enclosure.

Compliance Considerations: The Refining and Casting Area is located in the same building as the Furnaces. Compliance with these total enclosure requirements is demonstrated via the differential pressure and anemometer readings described below.

4.3 Material Storage and Handling Area

The RMPS Area and the Smelter Area both have Material Storage and Handling Areas. Differing physical and recordkeeping considerations lead them to being discussed separately.

There are three areas that may be designated as Material Storage and Handling Areas in the Plant:

1. Dross and Reverb slag storage and handling area in the smelter building.
2. Blast Furnace Feed Room
3. Reverb Furnace Feed Room

This description of Material Handling and Storage Areas includes a sufficient amount of the Smelter Building Area so as to make it reasonable to assume that all of the Smelter Building is included in this SOP.

The RMPS building has a Material Handling and Storage Area (Reverb Feed Room) in the building where desulfurized paste, other spent lead-acid battery components, and drosses are stored prior to feeding the material to the Reverb. The compliance considerations for the Materials Handling and Storage Areas in the Smelter Area and the RMPS Area will he discussed separately.

Minimum Requirements: Partial enclosure of storage piles, wet suppression and vehicle wash at each exit from the area or total enclosure of the area in a structure meeting the requirements of 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(1)(i) and ventilation to a control device and a vehicle wash at each exit. Condition no. 16 of the Rule 1420 plan requires that all fugitive emissions from the smelter/refining building and the blast furnace feed room be generated within a total enclosure subject to general ventilation that maintains the enclosure at a lower than ambient pressure to ensure in-draft through any and all doorways, windows, passages or openings of the enclosure. As per condition no. 16 of the Rule 1420 plan, process fugitive lead-dust emissions generated from the reverb furnace feed room shall be contained within a partial enclosure and shall be subject to the requirements of 40 CFR 63.545(c)(5).

Compliance Considerations for Material Storage and Handling in the Smelter Area: Two options exist; both are provided to assist the reviewer. Exide has chosen one out of the two options; the option Exide has chosen to follow is indicated accordingly.

Option I: As the Smelter Building does meet the requirements of a partial enclosure, cleaning of the building area floor around the furnaces twice a day with a small vacuum/sweeper type unit may provide a simple way to comply with this SOP.

> ***Compliance Recommendations for Option 1:*** Records of the cleaning would be kept, and the compliance would be achieved.

Option 2: Exide bas chosen to follow this option. The alternative is to ensure that the Smelter Building complies with the requirements of 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(1)(i) and ventilation of the building is routed through a control device which then meets the 2.0 mg/dscm maximum lead emission concentration.

> ***Compliance Recommendations for Option 2:*** 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(l)(i) apply to the design and operating standards for a containment building, regulated under RCRA. The specific portions of this requirements are as follows:
>
> 1. The building must be totally enclosed to protect from precipitation, wind, and run-on and assure containment of managed wastes.
>
> 2. Take measures to prevent tracking of hazardous waste out of the unit by equipment used to handle the waste. An area must be designated as a vehicle wash and any rinsate must be collected and properly managed.

3. Take measures to control fugitive dust emissions such that any openings exhibit no visible emissions.

4. All associated particulate collection devices must be operated and maintained with sound air pollution control practices. The state of no visible emissions must be maintained effectively at all times during normal operating conditions including when employees and vehicles are entering and exiting the unit.

5. If the containment building coupled with a control device operation is used for compliance with the Furnace Area SOP, then a vehicle wash area will he required al all building doorways that allow mobile equipment to exit the building.

As per the requirement of Condition no. 17 of the Rule 1420 plan, Exide Technologies will install at each leeward wall(s) of each of the total enclosures (smelter/refining building and the blast furnace feed room), a differential pressure gauge to measure on an ongoing basis, the pressure difference between the inside and outside of the enclosure. The gauge shall be certified by the manufacturer to be capable of measuring the pressure differential in the range of 0.02 to 0.2 millimeters of mercury (Hg). Furthermore as per condition no. 18 of the Rule 1420 plan, Exide will demonstrate to the satisfaction of the Executive Officer or designee that the inside of each total enclosure is maintained at a negative pressure as compared to the outside of the enclosure by ensuring that the differential pressure measured by each of the gauges installed pursuant to Condition No.17 is no less than 0.02 millimeters of mercury (Hg) when all of the enclosure doorways and openings are in the position they are in during normal operations. The pressure reading of each gauge at each wall will be recorded three times every calendar day, Sunday through Saturday. Each pressure reading recording event will occur at least once per operating shift and each recording event will not be less than four (4) hours apart. Log Sheet 3, Differential Pressure Record Log for Smelter/Refining Building and Blast Furnace Feed Room will be used to record the differential pressure readings. After six (6) months of recording the differential pressures, Exide may file a Rule 1420 Plan amendment application to request that the Executive Officer change the frequency of the recording of the differential pressures.

Apart from the differential pressure measurements stated above, Exide will use a propeller anemometer to demonstrate that there is in-draft at all doorways and openings of each of the total enclosures (smelter/refining building and the blast furnace feed room) to comply with Condition no. 20 of the Rule 1420 plan. The propeller anemometer will either be permanently installed at each doorway or opening or a hand held propeller anemometer shall be used. The demonstration will occur at each doorway and opening of each enclosure at least once per operating shift and each demonstration shall not be less than four (4) hours apart and shall demonstrate that in-draft occurs across the entire doorway or opening. The anemometer will be calibrated in accordance with manufacturer's recommendations. Log Sheet 4, In-Draft Demonstrations for Various Openings will be used to maintain the records. After six (6) months of anemometer in-draft demonstrations, Exide may file a Rule 1420 Compliance Plan amendment application to request that the Executive Officer change the frequency of the anemometer in-draft demonstrations or that the in-draft demonstrations no longer be required.

In accordance with Condition no. 19 of the Rule 1420 compliance plan, in the event the 0.02 millimeter mercury pressure standard in Condition No. 18 is violated, Exide will contact the SCAQMD at 1.800.CUT.SMOG, within one hour of discovery of the violation, and report the situation as a breakdown pursuant to Rule 430 – Breakdown Provisions, and take immediate steps to remedy the situation., The breakdown reporting provisions of this condition will apply only to the pressure differential gauge as noted and shall not require the shutdown of any other equipment(s).

Compliance Considerations for Material Storage and Handling in the Reverb Feed Room: Log Sheets 5 (Reverb Dryer), 6 (Blast Feedroom), and 7 (RMPS Plastic Loading) will be used to keep records for all vehicle washing. The daily logs will contain the following:

- Date
- Vehicle description
- Washed Vehicle
- Person who performed the washing

4.3.1 Physical Considerations of the Smelter Area's Material Storage and Handling Area

This description of Material Handling and Storage Areas includes a sufficient amount of the Smelter Building Area so as to make it reasonable to assume that all of the Smelter Building is included in this SOP. The Smelter Building is well-suited to being classified as a Containment Building in terms of the requirements of the NESHAP. The building has limited openings and uses cartridge collector control system to maintain a negative pressure condition inside the building.

A vehicle wash station will be present in the Reverb Feed Room which will be connected to the Smelter Area with an enclosed driveway. All vehicles leaving the Smelter Area will pass through the Reverb Feed Room Vehicle Wash prior to exiting the building.

4.3.2 Physical Considerations of the Reverb Feed Room Material Storage and Handling Area

As there is a liquid collection sump area in this part of the building, this area will be used to wash off any vehicle that is driven out of the Feed Room or the Smelter Building Area. A Vehicle Wash Area will be designated at the south truck doorway.

5 Other Miscellaneous Fugitive Emissions Control Required as per Rule 1420 Plan

5.1 Transport of Materials Capable Of Generating Fugitive Lead-Dust Emissions

As per Condition no. 6 of the Rule 1420 Plan, Exide will transport all materials capable of generating any amount of fugitive lead-dust emissions at the facility within closed conveyor systems or in closed containers. When transporting any materials capable of generating any

amount of fugitive lead-dust emissions via forklift or any other mobile transportation method in open alleys or any other open or partially open areas of the Exide facility, the materials capable of generating any amount of fugitive lead-dust emissions will be transported in closed containers and in such a manner as to prevent fugitive lead emissions from being released into the ambient atmosphere. This requirement will not apply to lead-bearing materials handled or transported within totally enclosed buildings that are maintained under negative pressure as described in Condition No. 16 of the Rule 1420 plan.

5.2 Dust Suppression Practices as per SCAQMD Rule 403

As per Condition no. 10 of the Rule 1420 plan, Exide will implement dust suppression practices, including but not limited to the use of water or other AQMD approved chemical dust suppressants as specified in SCAQMD's Rule 403 Handbook, in all areas where fugitive lead-dust emissions potential exists resulting from any maintenance or operations activity. In the event that dust suppression practices pose a safety risk to affected employees due to the nature of the maintenance or operations activity (e.g. electrical work, arc welding, etc.), the dust suppression practices may be suspended until such time that the safety risk (electrical work, arc welding, etc.) has been completed or removed, and once removed, the dust suppression practices will be immediately implemented.

5.3 Cleaning of Roof Tops of Various Buildings

As per Condition no. 11 of the Rule 1420 plan, Exide will, on a monthly basis, clean the entire roof tops of the smelting refining building, blast furnace feed building, and finished lead warehouse building and on a semiannual basis clean the roof tops of the RMPS and reverb feed buildings. Exide will clean the roof tops in sections or all at once by washing with water or spot vacuuming them using an AQMD permitted HEPA-type vacuum with a minimum efficiency guaranteed by the manufacturer of 99.97 percent on 0.3 micron size particles. Exide will keep a record of the dates and times of the cleanings. After six (6) months of such roof cleanings, Exide may file a Rule 1420 Plan amendment application to request that the Executive Officer change the frequency of the roof cleanings.

5.4 Spot Cleaning of Visible Dust

As per Condition no. 12 of the Rule 1420 plan, Exide will spot clean all traffic areas where any visible dust has accumulated including any visible dust that has accumulated outside of all office areas throughout each operating day. The spot cleaning will be accomplished using a wet mopping technique or by using an SCAQMD permitted HEPA-type vacuum with a minimum efficiency guaranteed by the manufacturer of 99.97 percent on 0.3 micron size particles.

5.5 Discarding of Personal Protective Equipment

As per Condition no. 13 of the Rule 1420 plan, Exide will inspect, at least one time each operating day, and as necessary, empty and clean out all drums containing Personal Protective Equipment (PPE) and dispose of all contaminated PPE as hazardous waste

5.6 Storage of Materials Capable Of Generating Fugitive Lead-Dust Emissions

As per Condition no. 14 of the Rule 1420 plan, Exide will store all materials capable of generating any amount of fugitive lead-dust emissions inside an enclosure or, if stored outside, will be sufficiently covered with plastic or a tarp to prevent lead-bearing dust from entering ambient air

5.7 Training

As per Condition no. 15 of the Rule 1420 plan, Exide will train staff responsible for compliance with Rule 1420 - Emissions Standard for Lead, housekeeping requirements, in all Rule 1420 housekeeping provisions and requirements before commencing with any Rule 1420 housekeeping duties, and will conduct future training yearly thereafter. Any new employees that will be responsible for carrying out any Rule 1420 housekeeping activities will be trained by Exide within 60 days of date of hire and before participating in any housekeeping activities. Training records, including staff names of trainees, will be retained for 5 years on site in a format approved by the Executive Officer or designee and made available upon request.

Appendix A

Log Sheets

Exide Technologies
Vernon, CA

Log Sheet 1: Plant Roadway And Side Walk Cleaning

Signature:_____

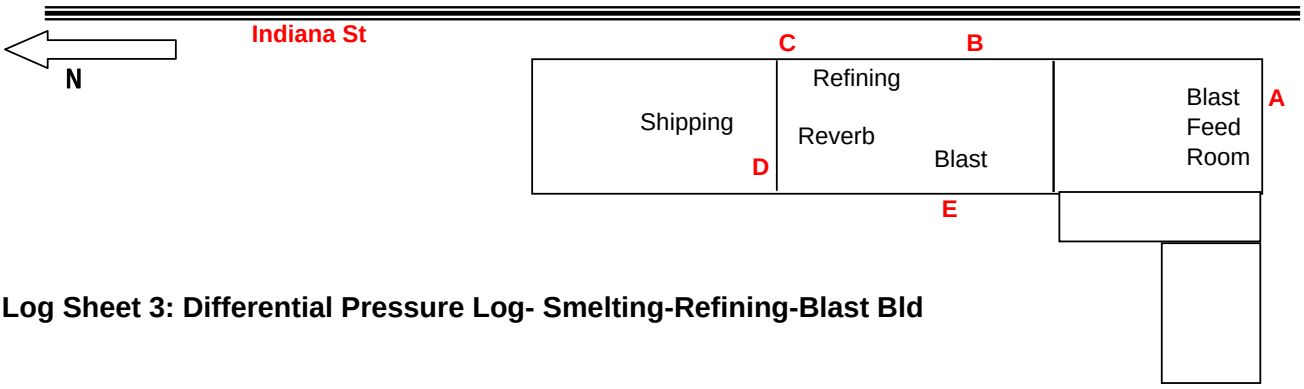
Print Name:_____

Date	Cleaner		Time Cleaned		Area Cleaned	Side Walk	Reason for not Cleaning
	1st	2nd	1st	2nd			
6/1/2008							
6/2/2008							
6/3/2008							
6/4/2008							
6/5/2008							
6/6/2008							
6/7/2008							
6/8/2008							
6/9/2008							
6/10/2008							
6/11/2008							
6/12/2008							
6/13/2008							
6/14/2008							
6/15/2008							
6/16/2008							
6/17/2008							
6/18/2008							
6/19/2008							
6/20/2008							
6/21/2008							
6/22/2008							
6/23/2008							
6/24/2008							
6/25/2008							
6/26/2008							
6/27/2008							
6/28/2008							
6/29/2008							
6/30/2008							
Must clean atleast one time per shift, unless rain prevents the cleaning process							

LOG SHEET 2: RMPS FLOOR & TRAILER AREA CLEANING LOG

INSIDE FLOOR AND OUTSIDE TRAILER AREAS MUST BE CLEANED AT APROXIMATE TIMES BELOW

DATE	CLEANER SIGNATURE						
	7:00 AM	9:00 AM	11:00 AM	1:00 PM	3:00 PM	5:00 PM	7:00 PM



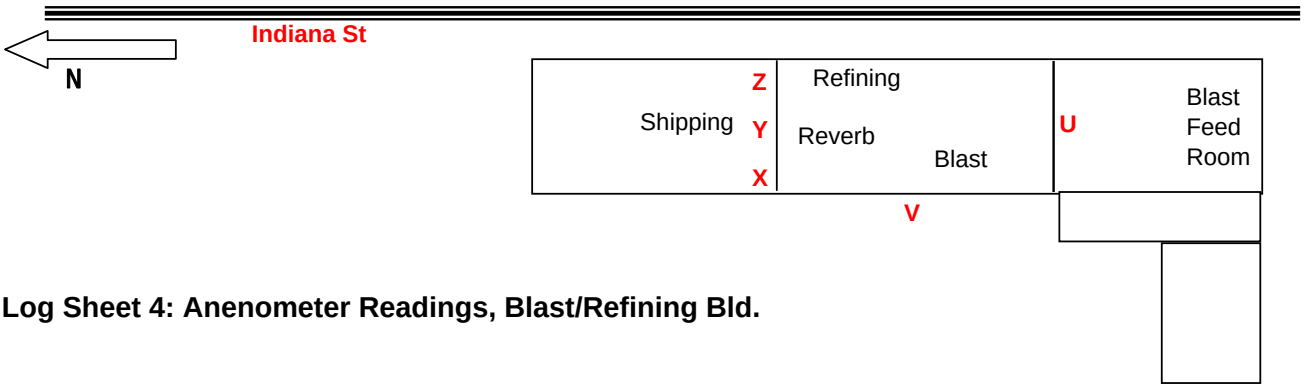
Log Sheet 3: Differential Pressure Log- Smelting-Refining-Blast Bld

Differential Pressure Readings *(in H2O)* Minimum .01 Negative

Week Of

	Mon	Int	Tues	Int	Wed	Int	Thur	Int	Fri	Int	Sat	Int	Sun	Int	Auditor Signature
Day- A															
B															
C															
D															
E															
Swing- A															
B															
C															
D															
E															
Grave- A															
B															
C															
D															
E															

	Mon	Int	Tues	Int	Wed	Int	Thur	Int	Fri	Int	Sat	Int	Sun	Int	Auditor Signature
Day- A															
B															
C															
D															
E															
Swing- A															
B															
C															
D															
E															
Grave- A															
B															
C															
D															
E															



Log Sheet 4: Anenometer Readings, Blast/Refining Bld.

Readings in Feet per Minute

Week Of

	Mon	Int	Tues	Int	Wed	Int	Thur	Int	Fri	Int	Sat	Int	Sun	Int	Auditor Signature
Day- U															
V															
X															
Y															
Z															
Swing- U															
V															
X															
Y															
Z															
Grave- U															
V															
X															
Y															
Z															

	Mon	Int	Tues	Int	Wed	Int	Thur	Int	Fri	Int	Sat	Int	Sun	Int	Auditor Signature
Day- U															
V															
X															
Y															
Z															
Swing- U															
V															
X															
Y															
Z															
Grave- U															
V															
X															
Y															
Z															

WEEK OF _____TO _____200____

LOG SHEET 5: REVERB DRYER

WHEEL WASH LOG

DATE	LICENSE PLATE #	NAME OF WASHER	TIME	NOTES
				MON
				TUE
				WED
				THU
				FRI
				SAT
				SUN

WEEK OF _____TO _____200____

LOG SHEET 6: BLAST FEEDROOM

WHEEL WASH LOG

DATE	LICENSE PLATE #	NAME OF WASHER	TIME	NOTES
				MON
				TUE
				WED
				THU
				FRI
				SAT
				SUN

WEEK OF _____TO _____200____

LOG SHEET 7: RMPS PLASTIC LOADING

WHEEL WASH LOG

DATE	LICENSE PLATE #	NAME OF WASHER	TIME	NOTES
				MON
				TUE
				WED
				THU
				FRI
				SAT
				SUN

ATTACHMENT B

1. PURPOSE

It is the policy of Exide Technologies to have a safe and healthful workplace. To that extend we have developed an accident and illness prevention program to provide all employees an accident/illness free work environment. All employees will participate in our goal to reduce our industrial injuries/illness to ZERO.

All members of management are expected to do everything within their control to assure a safe environment and to always be in compliance with federal, state and local Health & Safety regulations.

Employees are expected to obey safety rules, follow established safe work practices and exercise caution in all their work activities.

All employees are expected to immediately report any unsafe conditions to their supervisor and the Health & Safety department. Employees at all levels of our organization are responsible for correcting any unsafe conditions .

Working together, we can succeed in having a safe, healthful and profitable workplace from which we all will benefit.

2. SCOPE

This Program applies to all Exide Technologies employees.

3. RESPONSIBILITIES FOR IMPLEMENTATION

Appendix A – Members of Management

3.1 Health & Safety Manager – will be responsible for coordinating this program. Responsibilities will include:

- 3.1.1 Implement and update the injury illness prevention plan.
- 3.1.2 Record keeping of all training and retraining.
- 3.1.3 Record keeping of all injuries / illness.
- 3.1.4 Training of all managers and supervisors on the injury and illness prevention program.
- 3.1.5 Ensure programs meet government regulations.
- 3.1.6 Maintain and update all policies that apply to the injury and illness program.

3.1.7 Work with plant Manager to assign responsibility and accountability to individuals.
3.1.8 Provide active leadership by participation and modeling safe behavior
3.1.9 Keep up to date information on local, state and federal health and safety regulations.
3.1.10 Keep all levels of management informed of all regulations and standards.
3.1.11 Conduct accident reporting and investigation procedures.
3.1.12 Maintain liaison with outside agencies such as local and state agencies as well as federal agencies, safety council, and the insurance carrier.
3.1.13 Plan, organize and coordinate Health & Safety training.
3.1.14 Ensure compliance with all corporate policies.

3.2 Managers and Supervisors

3.2.1 `
3.2.2 Keep informed about safety and health regulations affecting the operations they supervise.
3.2.3 Ensure employees understand how to complete each task to which they are assigned in a safe manner
3.2.4 Train personnel on machine hazards
3.2.5 Training personnel how to perform specific lock/tagout operations.
3.2.6 Ensure machines and equipment are maintained in safe operating condition.
3.2.7 Ensure employees follow all safety and health regulations and work practices, including using required personal protective equipment.
3.2.8 Investigate accidents that may occur, identify the corrective action necessary to prevent a similar accident from occurring.
3.2.9 Report, without any delay, any unsafe and unhealthful conditions which they can not correct.
3.2.10 Generate work orders to repair equipment
3.2.11 When an employee gets injured, provide medical attention, if medical treatment is required, accompany the employee or sent someone with the injured employee.
3.2.12 Perform regular inspections and process review to ensure imminent danger conditions are identified and abated immediately.
3.2.13 Are responsible for modeling safe work practices
3.2.14 Following all safety directives, policies and procedures.
3.2.15 Assisting in maintaining a safe work environment.
3.2.16 Are expected to enforce the rules fairly and uniformly.

3.3 Leadpersonnel

3.3.1 Perform regular inspections and process review to ensure imminent danger conditions are identified and abated immediately.
3.3.2 Ensure machines and equipment are maintained in safe operating condition.
3.3.3 Assist with training of new department personnel.

3.3.4 Participate in accident and near miss investigations
3.3.5 Ensure employees follow all safety and health regulations and work practices, including using required personal protective equipment.
3.3.6 Are responsible for modedling safe work practices
3.3.7 Following all safety directives, policies and procedures.
3.3.8 Assisting in maintaining a safe work environment.

3.4 Employees
3.4.1 Attend weekly safety meetings.
3.4.2 Inspect personal protective equipment daily.
3.4.3 Wear personal protective equipment as trained to do so.
3.4.4 Participate in safety inspections.
3.4.5 Follow a safety and health rules
3.4.6 Perform pre-shift inspections as required
3.4.7 Report any unusafe condition.
3.4.8 Particpate in STOP.
3.4.9 Are responsible for using safe work practices
3.4.10 Following all safety directives, policies and procedures.
3.4.11 Assisting in maintaining a safe work environment.

4. SYSTEM AND PROCEDURES TO ENSURE COMPLIANCE:

4.1 All employee will be informed of the provisions of our IIP Program.
4.2 All new employees will be trained on the Safety Policies and Procedures.
4.3 The Safety Recognition Program will recognize all employees who maintain an injury free work environment.
4.4 Any employee who, intentionally or unintentionally, creates an unsafe work condition or environment will be progressively disciplined up to and including discharge.
4.5 Anytime discipline action is taken due to a safety violation the employee will be retrained on safety.
4.6 Regular walk-thu of the facility and STOP observations will be performed to evaluate the safety performance of all worker
4.7 Providing training to workers whose safety performance is deficient

5. COMMUNICATION PROGRAM

Exide recognizes that open, two-way communication between management and staff on health and safety issues is essential to an injury-free, productive workplace. The following system of communication is designed to facilitate a continuous flow of safety and health information between management and employees in a form that is readily understandable and consists of one or more of the following checked items:

5.1 New hire orientation including a discussion of safety and health policies and procedures.
5.2 Review of our IIP Program.

5.3 Workplace safety and health training programs.

5.3.1 Weekly scheduled safety meetings. Each supervisor holds a weekly meeting with his or her shift. Minutes of the meeting are kept and attendees are asked to sign a sheet verifying their attendance. Training required by regulatory agencies, Exide programs or general safety topics are covered. Audiovisual training aids are available.

5.4 Effective communication of safety and health concerns between workers and supervisors, including translation where appropriate.

5.5 Posted or distributed safety information.

5.6 A system for workers to anonymously inform management about workplace hazards.

5.7 A labor/management safety and health committee that meets regularly, prepares written records of the safety and health committees meetings, reviews results of the periodic scheduled inspections, reviews investigations of accidents and exposures and makes suggestions to management for the prevention of future incidents, reviews investigations of alleged hazardous conditions, and submits recommendations to assist in the evaluation of employee safety suggestion.

5.8 Posting information on communication boards.

5.8.1 *"STOP SAFETY" TEAM* Exide Technologies implemented the Du Pont STOP (Safety Training Observation Program) in the summer of 2000. This program involves all employees, including supervisory and management personnel, in the identification of safety related conditions and practices within the workplace. As a routine component of the STOP program, weekly observation meetings are held with all departments on each shift to document and identify safe and un-safe conditions within the department. Where necessary, maintenance work orders are issued and /or corrective action procedures are placed into effect.

5.8.2 5 S" Safety Committee members will perform monthly 5 S evaluations. This program involves the identification of safety related conditions within the workplace. The 5s is another method for creating a self-sustaining culture which perpetuates a neat, clean, efficient workplace.

6. IDENTIFYING AND EVALUATING WORKPLACE HAZARDS

6.1. To maintain a safe and healthful workplace we need to have a way to identify hazards in the workplace. Recognizing that unsafe work practices generally cause more accidents than unsafe conditions (by themselves), we intend to focus on BOTH - UNSAFE WORK PRACTICES AS WELL AS UNSAFE PHYSICAL CONDITIONS.

6.2. Although it is our intention to eliminate all unsafe conditions and work practices as quickly as possible, some corrective action will require longer period and / or larger expenditures of capital. Because of this, it will be necessary to evaluate the seriousness of the hazards and focus our attention on those that have the potential to serious injury or illness.

6.3. If a condition or practice is identified as constituting an "imminent danger", the individual will immediately notify the supervisor, operator and affected personnel. **Imminent Danger, is defined**

as a condition or practice that can reasonably be expected to cause death or serious physical harm before it can be abated. All personnel will be withdrawn from the area. If personnel are not involved, the area will be cordon-off to prevent anyone from entering the area and/or equipment will be tagged and taken out of service.

6.4. Identify and report individuals that are at high risk for violence. Whether they be the perpetraitor or the potential victim. Be aware of indicators: discourteous behavior where personnel are intimidated/bullied, harassed, assaulted verbally or physically. Report personnel that come to work: either with physical or emotional injuries, purposely cause damage to assets, impede the work of others, threaten others or self with bodily injury.

6.5. Inspection of the work place is our primary tool to identify unsafe conditions and practices.

6.5.1. These are some standards we use for inspections:
- 6.5.1.1. Compliance of our safety rules.
- 6.5.1.2. Machinery or other equipment without necessary guards.
- 6.5.1.3. Unsafe use or storage of chemicals, including flammable.
- 6.5.1.4. Personal Protective Equipment not being used when required or being used improperly.
- 6.5.1.5. Obvious violations of good housekeeping practices.
- 6.5.1.6. Machinery, handtools or other equipment in poor conditions or being used improperly.
- 6.5.1.7. Other deviations from accepted safe practices. In addition to scheduled periodic inspections, inspections will be made if the following conditions exits:
- 6.5.1.8. Whenever new substances, processes, procedures or equipment are introduced to the workplace that represents a new occupational safety or health hazard.
- 6.5.1.9. Whenever we are made aware of new or previously unrecognized hazards.

7. ACCIDENT INVESTIGATIONS

7.1. If an accident occurs, is the supervisor's responsibility to complete the accident report within 24 hours of occurrence or as soon as practical. All specifics to the identification of the hazard(s), all factors that may have caused or contributed to the accident, are to be noted in the appropriate section of this report. The report is filed with the H&S Manager, Plant Manager and Human Resources Manager.

7.2. Procedures for investigating workplace accidents and hazardous substance exposures include:
- 7.2.1. Visiting the accident scene as soon as possible
- 7.2.2. Interviewing injured workers and witnesses
- 7.2.3. Examining the workplace for factors associated with the accident/exposure
- 7.2.4. Determining the cause of the accident/exposure
- 7.2.5. Taking corrective action to prevent the accident/exposure from reoccurring; and
- **7.2.6.** Recording the findings and corrective actions taken.

8. CORRECTING UNSAFE CONDITIONS AND WORK PRACTICES

8.1. Unsafe or unhealthy work conditions, practices or procedures shall be corrected in a timely manner based on the severity of the hazards. Hazards shall be corrected according to the following procedures:

8.1.1. When observed or discovered

8.1.2. When an imminent hazard exists which cannot be immediately abated without endangering employee(s) and/or property, we will remove all exposed workers from the area except those necessary to correct the existing condition. Workers necessary to correct the hazardous condition shall be provided with the necessary protection; and

8.1.3. All such actions taken and dates they are completed shall be documented on the appropriate forms.

8.2. Although it is our intention to eliminate all unsafe conditions and work practices as quickly as possible, some corrective action will require longer period and / or larger expenditures of capital. Because of this, it will be necessary to evaluate the seriousness of the hazards and focus our attention on those that have the potential to serious injury or illness.

8.3. Employees should make recommendations for changes in the workplace or in work practices which will improve job safety and performance.

8.4. Supervisors are responsible for making changes in operations and work practices which improve the safety and job performance of the people in their areas of responsibility. When changes are not within their budget, authority, or expertise, they must assure that the proper people with authority to correct the condition are aware of the situation.

8.5. Managers have the responsibility to assure efficient and safe operations within their areas of responsibilities.

8.6. Each person responsible for corrective action must:

8.6.1. Have a plan for correcting unsafe conditions or work practices.

8.6.2. Select priorities and correct hazards in order of potential seriousness.

8.7. Corrective action generally falls into four categories:

8.7.1. **Engineering or mechanical controls or job design** - this is the preferred method since it usually eliminates or reduces the hazard and is a permanent solution.

8.7.2. **Training** - Once a job procedure has been established, employees can be trained in the proper and safe method to do the job. While training is always desirable, the problem with this solution is that it requires constant supervision to make sure employees continue to do the job in the manner in which they have been trained.

8.7.3. **Administrative Controls -** These are methods which can control employees' exposures by scheduling reduced work times in contaminants areas, and other work rules. this type of control also involve rotating employees between departments which may become difficult to administer.

8.7.4. **Personal Protective Equipment (PPE) –** This is the last resort method when engineering controls are not sufficient to achieve acceptable limits of exposure. Personal Protective Equipment can be used in conjunction with engineering controls and other methods. All Supervisors are expected to make sure that the personal protective equipment is being properly used.

9. TRAINING PROGRAM

All Exide employee, including managers and supervisors, shall have training and instruction on general and job-specific safety and health practices. Training and instruction shall be provided as follows:

9.1 To all new employees, except for construction employees who are provided training through a Cal/OSHA approved construction industry occupational safety and health training program

9.2 To all employees given new job assignments for which training has not previously provided;

9.3 Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard

9.4 Whenever a new or previously unrecognized hazard is identified

9.5 Supervisors to familiarize them with the safety and health hazards to which employees under their immediate direction and control may be exposed; and

9.6 To all employees with respect to hazards specific to each employee's job assignment.

9.7 To all employees for annual refresher training

10. SAFETY POLICIES AND PROCEDURES

EXIDE TECHNOLOGIES makes every effort to provide safe facilities and adequate equipment for your protection because we are greatly concern about your safety and health. It is your responsibility to take every precaution so that your action will not lead to an injury or damage of company property.

10.1 The following safety rules have been formulated as a general guide to all employees for the prevention of accidents. It should be made clear that these rules do not constitute all the safety requirements in the plant. Your supervisor will issue verbal or written safety instructions for your particular job.

10.2 In the best interest of all concerned, disciplinary action will be taken when any of these safety rules or specific safety instructions for your jobs are disregarded.

10.2.1 **NO SMOKING** – Tobacoo producst are strictly forbidden except at the assigned smoking canopy located near the pond.

10.2.2 **HORSEPLAY PROHIBITED - " Horseplay " is dangerous and a poor excuse for fun. It will not be tolerated on Company property. Horseplay includes any willful act which may startle or distract other employees.**

10.2.3 **PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN - Personal Protective Equipment (PPE) is provide to all employees at no cost to the employee : such as safety glasses, safety shoes/ boots etc.. is provided for your personal safety and must be worn properly. All plant employees are required to wear safety glasses, hard hats, respirators and at a min HEPA filters, and safety shoes in the plant. Company issued uniforms are provided and laundry at no cost to the employee.**

10.2.4 **SAFETY TAGS AND SIGNS - Safety signs and danger tags are used to warn employees against accident hazards. Disregard of safety signs, tags, or operation of equipment that has been tagged out is a serious offense and it will not be tolerated.**

10.2.5 **USE OF SAFETY DEVICES AND GUARDS - Employees are required to use the safety devices and guards installed on machines and equipment they operate. They must not remove or make inoperative except by authorized personnel.**

10.2.6 **DO NOT OPERATE UNLESS ASSIGNED - Do not operate, repair, or adjust machinery and equipment unless assigned by your supervisor.**

10.2.7 **RIDING ON FORKLIFT - Employees are not permitted to ride on or be raised up on a forklift trucks unless a special safety platform has been provided. Riding on walk along trucks is not permitted.**

10.2.8 **REPORT ALL INJURIES IMMEDIATELY - Every incident (injury & near miss) no matter how small it is, must be reported immediately. Prompt treatment by trained personnel may prevent further aggravation. It will also enable your supervisor to investigate and take immediate corrective action to prevent a similar accident.**

10.2.9 **WEAR PROPER CLOTHING AND APPAREL - Loose fitting or torn clothes must not be worn around machinery. Canvas, open toe shoes, slippers, sandals, etc. are not permitted in plant areas.**

10.2.10 **MAINTAIN GOOD HOUSEKEEPING. - Employees are required to keep their machines, equipment, and work areas are clean at all times. Aisles, exits, and fire equipment must never be blocked.**

10.2.11 **HYDRATION – Employees must make every effort to come to work hydrated, especially during the hot season. Employees are encouraged to arrive a couple of minutes early, go upstairs and drink a minimum of 8 oz of water or any hydrating beverage, prior to the start of their shift. They must also drink water or any hydrating beverage throughout the shift.**

11. RECORD MAINTENANCE

11.1 Records of hazard assessment inspections, including the person(s) or persons conducting the inspection, the unsafe conditions and work practices that have been identified and the action taken to correct the identified unsafe conditions and work practices, are recorded on a hazard assessment and correction form.

11.2 Documentation of safety and health training for each employee, including the employee's name or other identifier, training dates, type(s) of training, and training providers are recorded on a employee training and instruction form. We also include the records relating to employee training provided .

11.3 Inspection records and training documentation will be maintained according established Program protocols.

12. DISCIPLINE - RIGHTS AND RESPONSIBILITIES

12.1 California state law requires Exide Technologies to have a system for ensuring that employees comply with safe and healthy work practices which may include disciplinary action.

12.2 **ALL SUPERVISORS ARE TO ENFORCE OUR SAFETY RULES AND ENSURE THAT EMPLOYEES COMPLY WITH ESTABLISHED SAFE PRACTICES. (THIS ALSO INCLUDES THE PROPER USE OF ALL PERSONAL PROTECTIVE EQUIPMENT.)**

12.3 Supervisors are to make sure safe job procedures have been established and all employees have been trained in the correct job procedure.

12.4 Once this is done, unsafe job procedures are not to be tolerated. Any member observing unsafe job behavior is expected to bring it to the attention of the person's supervisors. Supervisors are expected to take steps immediately to correct the behavior.

12.5 When a disciplinary measure must be used, the company's disciplinary procedure must be used. This procedure is as follows:

First offense	-	Verbal Warning
Second Offense	-	Written warning
Third Offense -	-	Five Day Suspension
Fourth Offense	-	Termination

APPENDIX A

LIST OF TRAINING SUBJECTS

Training subjects include, but are not limited to :

- Code of Safe Practices
- Confined spaces
- Good housekeeping, fire prevention, safe practices for operating any construction equipment
- Safe procedures for cleaning, repairing, servicing and adjusting equipment and machinery
- Safe access to working areas
- Electrical hazards, including working around high voltage lines
- Crane operations
- Guarding of belts and pulleys, gears and sprockets, and conveyor nip points
- Machine, machine parts, and prime movers guarding
- Lock-out/tag-out procedures
- Materials handling
- Power tool
- Fall protection from elevated locations.
- Industrial Vehicles
- Slips, falls, and back injuries
- Ergonomic hazards, including proper lifting techniques and working on ladders or in a stooped posture for prolonged periods at one time
- Personal protective equipment
- Respiratory Protection
- Hazardous chemical exposures
- Hazard communication
- Heat Stress Prevention
- Laboratory safety

- Safety Work Permit
- Hot Work Permit
- Line Breaking Permit
- Energized Permit
- Fall Protection
- Reducing Blood Leads
- Bloodborne pathogens
- Molten Metals
- Respirator Training – Fit Testing
- Ladder Safety
- Workplace Violence Prevention

All employees at all levels are responsible for safety and health .

Revision	Date	Section	Revision(s)
6	6/18/14		Updated

ATTACHMENT C

Date: May 2015

EXIDE TECHNOLOGIES INC.
VERNON, CALIFORNIA
SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

QUICK REFERENCE TABLE

Emergency Contact: John Hogarth	Work Phone: (323) 262-1101 x 275
Title: Plant Manager	Cell: (323) 395-6130
Secondary Contact: Nicolas Serieys	Work Phone: (323) 262-1101 x 259
Title: Interim Environmental Manager	Cell: (323) 220-7920
Tertiary Contact: Rafael Perez	Work Phone: (323) 262-1101 x 241
Title: Operations Manager	Cell: (818) 974-5358
Type of Facility: Secondary Lead Recycling	
Operating Schedule: 24 hours per day, 7 days per week, 365 days per year	
Number of Employees: 124	

Emergency Procedures for Spills are outlined on the next three pages.

Date: May 2015

EMERGENCY RESPONSE PROCEDURES FOR AN OIL RELEASE OR SPILL

Complete the following steps for any spill, release or threatened release

PLANT PERSONNEL

STEP 1: Contact Nicolas Serieys, Spill Prevention Team Leader, at (323) 262-1101 x259 and notify him that a release or spill has occurred. If Nicolas Serieys is unavailable, contact John Hogarth at (323) 262-1101 x 275.

STEP 2: Immediately Notify:
California State Warning Center (California Office of Emergency Services) (800) 852-7550
City of Vernon Emergency Services (323) 583-8811

STEP 3: If possible, eliminate the source of the release or spill.

STEP 4: Utilize the absorbent socks or spill absorbent material located in the Mobile Maintenance Building to prevent the release or spill from migrating to drains, soil, or water source.

STEP 5: With the supervision of Mr. Serieys or Mr. Hogarth, clean up all released or spilled oil as soon as possible using the available spill response equipment. If a large spill occurs, a suction truck may be required to clean up the release or spill.

STEP 6: Dispose of the cleaned-up material off-site at an appropriate facility.

Date: May 2015

SPILL PREVENTION TEAM LEADER

Complete the following steps: (1) if a release or discharge of oil causes a film, sheen upon, or discoloration of the surface of the water located in on-site drainage ditches, or (2) if a spill of 42 gallons or more of oil occurs.

STEP 1: Go to the location of the release or spill of oil to determine the quantity and extent of the release or spill.

STEP 2: Supervise and direct plant personnel in minimizing the extent of the release or spill and direct plant personnel in appropriate clean-up activities.

STEP 3: Contact the Local Emergency Response Agency at 911 and the Governor's Office of Emergency Services at (916) 262-1621 or (800) 852-7550.

STEP 4: If the spill reaches navigable waters of the United States (Los Angeles Channel), contact the National Response Center at (800) 424-8802 and the United States Coast Guard Marine Safety Office (Los Angeles/Long Beach) at (562) 980-4444.

STEP 5: If the release or spill requires notification, within 14 days of the release complete the Release or Spill Notification Form, attach it to the SPCC Plan, and submit a completed form to the Governor's Office of Emergency Services (OES):

Governor's Office of Emergency Services
2800 Meadowview Road
Sacramento, California 95832
(916) 262-1621

STEP 6: If the release or spill requires notification to any of the above agencies, verify that the Release or Spill Notification Report is attached to the Spill Prevention Control and Countermeasures plan and that the plan is reviewed and modified as appropriate to identify measures to prevent the reoccurrence of such release.

Date: May 2015

RELEASE OR SPILL NOTIFICATION REPORT

List of Significant Spills and Leaks	Facility Name: Exide Technologies	
	Facility Address: 2700 S. Indiana Street	
	Vernon, CA 90058; 323-262-1101	
	Date:	Time:
	Completed by:	
Instructions: Record on this form all significant spills or releases of oil that occur at the facility.		
Definition: Significant spills include, but are not limited to, releases of oil in excess of harmful quantities.		
Date of Spill or Leak:		
Location as Indicated on the Site Map:		
Circle one: Spill Leak Both		
Type of Material:		
Quantity:		
Media Impacted (air, soil, water):		
Source (if known):		
Reason for Spill or Leak:		
RESPONSE		
Amount of Material Recovered:		
Preventative Measures Taken:		

Date: May 2015

Spill Prevention Control and

Countermeasure Plan

Revision 4.7

Prepared for

Revised: May 2011
Revised: April 2012
Revised: January 2013
Revised: March 2013
Revised: August 2014
Revised: February 2015
Revised: May 2015

Originally Prepared by

RMT, Inc.

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Atlanta, Georgia 30328

499.10035

Date: May 2015

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Date: May 2015

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Date: May 2015

1.0 INTRODUCTION

The EXIDE Technologies facility is located at 2700 South Indiana Street, Vernon, California. The plant is an existing Secondary Lead Recycling Facility which has been operated at this location since 1922 for the recovery of secondary lead from spent automotive batteries and other lead-bearing materials received from off-site.

The facility has a 2,000 gallon aboveground storage tank (AST) containing diesel fuel located in the west yard, between the Mobile Maintenance Building (Garage) and the Maintenance Storage Building. There are numerous 35 to 55-gallon drums located at the Mobile Maintenance Building and PAC Center building that contain grease, waste oil, transmission fluid, and hydraulic fluid. There are also five small tanks containing lubricating oil ranging in size from 220-gallons to 110-gallons located in a small building attached to the Mobile Maintenance Building.

The National Oil Spill Prevention, Control, and Countermeasure Program was implemented under the authority of Section 311 of the 1970 Federal Water Pollution Control Act, also known as the Clean Water Act (CWA). The CWA required the Administrator of the United States Environmental Protection Agency (EPA) to enter into programs designed to prevent, reduce, or eliminate pollution of the navigable waters of the United States. EPA published regulations for the prevention of pollution of waters of the United States by oil emanating from non-transport related onshore and offshore facilities. The regulations are identified as Title 40, Code of Federal Regulations, Part 112 (40 CFR Part 112), "Oil Pollution Prevention - Non-transportation Related Onshore and Offshore Facilities." The main requirement of facilities subject to the regulation is the preparation and implementation of a plan to prevent any discharge of oil into waters of the United States. Such a plan is referred to as a Spill Prevention, Control and Countermeasure (SPCC) plan. This plan outlines the procedures, methods, and equipment used at the Exide Technologies Inc. facility to comply with EPA oil spill prevention control and countermeasures standards, inspection, training, and record keeping requirements.

2.0 KEEPING PLANS CURRENT/DISTRIBUTION

The plan must be amended whenever there is a change in facility design, construction, operation, or maintenance that has a significant effect on the potential for the discharge of oil into or upon the navigable waters of the United States or if a spill event occurs and requires an update of the plan to prevent reoccurrence of the spill. The plan must also be modified in accordance with any findings in **Section 9.0.**

Revision No.	Date	Distribution	
		Location	**Yes/No**
0	12/97	Regional Director	Yes
		Regional Env. Manager	Yes
		Process Engineer	Yes
		Health & Safety Coordinator	Yes
1	3/99	Environmental Manager	Yes
		Env. Technical Manager	Yes
		Process Engineer	Yes
		Health & Safety Coordinator	Yes
Reason for Revision: Update and certify plan to include changes in oil management.			
2	1-00	Environmental Manager	Yes
		Env. Technical Manager	Yes
		Process Engineer	Yes
		Health & Safety Coordinator	Yes
Reason for Revision: Replaced bulk oil storage tanks in Mobile Maintenance and used smaller tanks.			
3	10-01	Environmental Health and Safety Manager	
		Plant Superintendent	
		Process Engineer	
		Maintenance Manager	

Revision No.	Date	Distribution	
		Location	**Yes/No**
Reason for Revision: Change in plant personnel responsible for plan implementation.			
4	02-2010	Environmental Health Safety Manager	Yes
		Plant Manager	Yes
		Plant Superintendent	Yes
Reason for Revision: EH&S Position was split into two positions: Environmental Manager and Safety Manager. There is a new Plant Manager and Maintenance Manager.			
4.1	5/11	Plant Manager	Yes
		Maintenance Manager	Yes
Reason for Revision: There is a new Plant Manager and Maintenance Manager.			
4.2	4/2012		
Reason for Revision: Change reflect changes in personnel, positions, and Self Certification of Plan by an Authorized Facility Representative.			
4.3	11/2013	Environmental Manager, Plant Manager	Yes
Reason for Revision: Change reflects changes in personnel.			
4.4	13/2013	Environmental Manager, Plant Manager	Yes
Reason for Revision: Change reflects changes in personnel.			
4.5	18/2014	Environmental Manager, Plant Manager	Yes
Reason for Revision: Change reflects changes in personnel.			
4.6	2/2015	Environmental Manager, Plant Manager	Yes
Reason for Revision: Change reflects changes in personnel.			

Date: May 2015

Revision No.	Date	Distribution	
		Location	Yes/No
4.7	5/2015	Environmental Manager, Plant Manager	Yes
Reason for Revision: Update material inventory, spill notification			

3.0 CERTIFICATIONError! Bookmark not defined.

Substantial Harm Criteria

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes (No)

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes (No)

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife, and to sensitive environments?

Yes (No)

4. Does the facility have a total oil storage capacity greater than 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

Yes (No)

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes (No)

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Nicolas Serieys
Interim Environmental Manager

Date: May 2015

I hereby certify that I have examined the facility and being familiar with the provisions of 40 CFR Part 112 and 40 CFR Part 112.3(d) attest that this SPCC Plan has been prepared in accordance with good engineering practices and that the facility meets the eligibility requirements to Self-Certify the SPCC Plan: 1) The Total aboveground oil storage capacity is 10,000 U.S gallons or less, and 2) The facility has had no single discharges of oil to navigable waters or adjoining shorelines exceeding 1,000 U.S. gallons, or no two (2) discharges of oil to navigable waters or adjoining shorelines each exceeding 42 U.S. gallons within any 12-month period.	
Name: John Hogarth	Authorize Facility Representative: Plant Manager
Signature: J Hogarth	Date Signed: MAY 12, 2015.

4.0 RELEASES OF OIL IN HARMFUL QUANTITIES

Notification to the City of Vernon and the California State Warning Center is required for releases or threatened releases if they pose a hazard to human health and safety, environment, or property (notification should be made even if the impacts are potential or delayed). The notification must be done immediately and via telephone:

- California State Warning Center (California Office of Emergency Services) (800) 852-7550
- City of Vernon Emergency Services (323) 583-8811

Releases of oil in harmful quantities is defined in 40 CFR Part 110.3 as discharges of oil in such quantity that may be harmful to the public health or welfare or the environment of the United States and includes discharges of oil that: (a) violate applicable water quality standards; or (b) cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

Where a release containing oil in a harmful quantity occurs upon the navigable waters of the United States, the discharger is required to notify the following agencies as soon as he or she has knowledge of the release:

- National Response Center (NRC) at (800) 424-8802;
- Governor's Office of Emergency Services (OES) at (800) 852-7550,
- United States Coast Guard Marine Safety Office at (562) 980-4444, and
- Local Emergency Response Agency at 911.

Where a release of one barrel (42 gallons) or more of oil occurs and does not impact the navigable waters of the United States, the discharger is required to notify the following agencies as soon as he or she has knowledge of the release:

- Governor's Office of Emergency Services (OES) at (800) 852-7550, and
- Local Emergency Response Agency at 911.

Unless specifically directed otherwise, the permittee must submit within 14 calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and steps to be taken in accordance with this plan. The description is to be submitted to OES at:

Date: May 2015

Governor's Office of Emergency Services
2800 Meadowview Road
Sacramento, California 95832
(916) 262-1621

This plan must be modified within 14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

5.0 SPILL PREVENTION TEAM

The Spill Prevention Team is responsible for developing the SPCC plan and assisting the Environmental Manager in the implementation, maintenance, and revision of the plan.

Spill Prevention Team Leader: Nicolas Serieys
Official Title: Interim Environmental Manager
Office Phone Number: (323) 262-1101 x259

Mr. Serieys is responsible for the spill prevention, control and countermeasure activities at the facility. The role as leader of the Spill Prevention Team includes the following duties:

- Communicating with regulatory agencies
- Ensuring all reports are submitted
- Spill Response Coordinator
- Accountable for oil spill prevention
- Supervise spill and leak cleanup
- Perform monthly inspections of the facility
- Update Plan as Necessary

Spill Prevention Alternate Team Leader: Rafael Perez
Official Title: Operations Manager
Office Phone Number: (323) 262-1101 x241

Mr. Perez is responsible for supporting the Spill Prevention Team Leader's work by providing adequate resources to complete the following activities and programs identified in the SPCC:

- Ensuring that spill prevention, control and countermeasures are included in employee training classes and providing training for all aspects of the plan.

6.0 POTENTIAL POLLUTION SOURCES

6.1 Site Plan/Drainage

A USGS topographic map showing the facility location is included as **Figure 1**. A site plan showing the layout of the facility is included as **Figure 2**.

The facility drainage has been designed so that all storm water or liquid spills at the facility are captured in the facility's storm water drainage system. Once the storm water reaches the drainage system, it can either be pumped directly to the water treatment plant or pumped to the storm water retention pond and then to the treatment plant. The storm water retention pond is used primarily when the water treatment plant cannot handle the amount of storm water that the drainage system is collecting.

6.2 Petroleum Product Storage

An inventory of petroleum products located at the facility are listed in **Table 1**.

2,000-Gallon Diesel AST

The 2,000-gallon AST is a Lube Cube Vault Tank constructed in October 1997. The Vault Tank has three containment systems. The primary containment is an Underwriter's Laboratory (U.L.) listed steel rectangular tank. The secondary containment is a 6-inch thick vibrated concrete vault that encases the primary steel tank. The third containment is a 10-gauge rectangular steel tank that covers all sides and the bottom of the concrete vault. The system also utilizes a leak detector tube to allow for monitoring. The Vault Tank has a top mounted 4-inch diameter fill port and a 6-inch diameter emergency vent. The fill port is capped and locked when not in use.

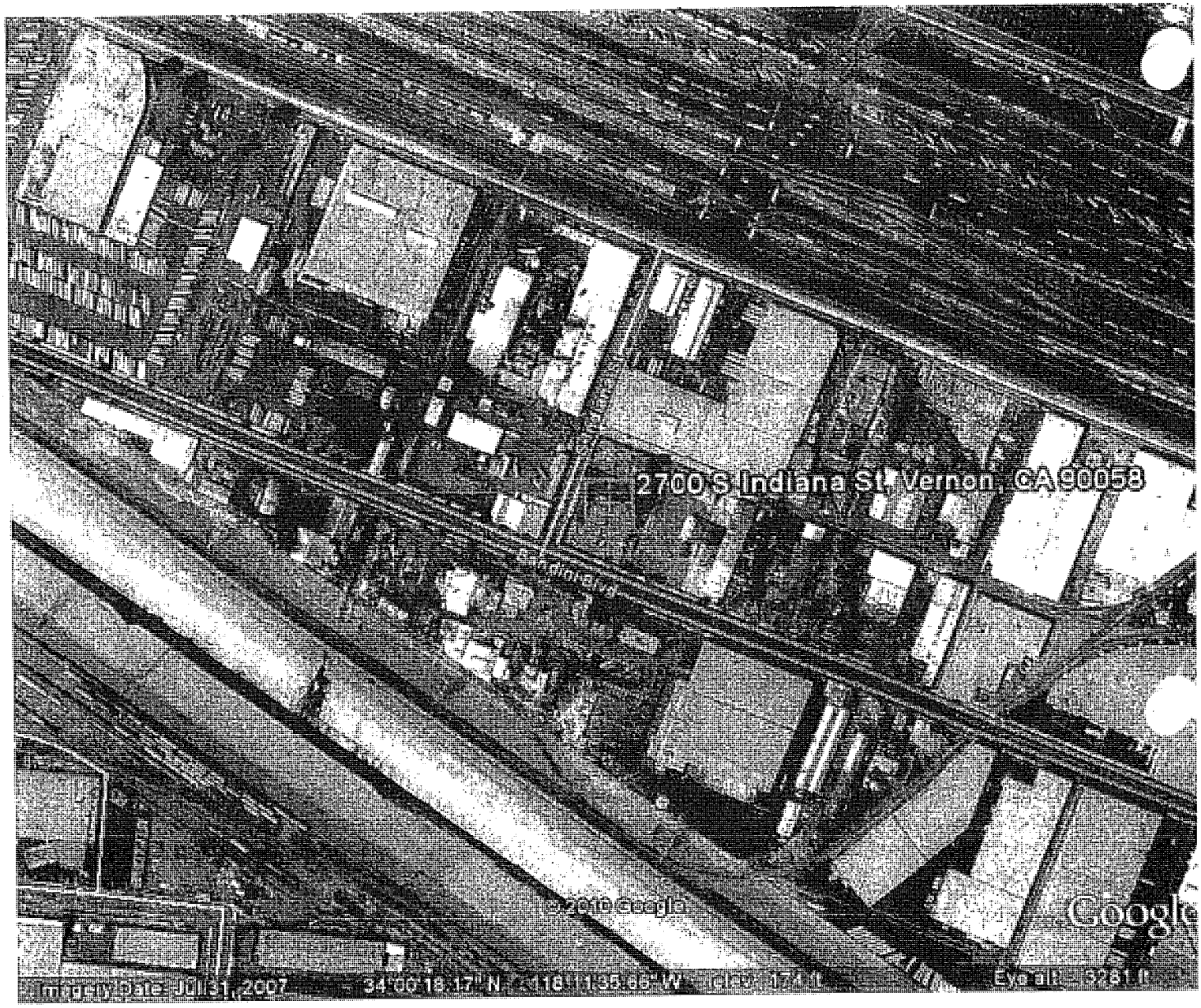
Because of the containment and leak detection utilized by the Vault Tank, the potential for a leak to have an impact on the environment is minimal. If a leak or spill were to occur, it would flow toward the west. Spill equipment would be used to contain the spill within the immediate area and remove all oil from the spill area. In the event that the spill could not be contained and it reaches the facility's storm water drainage system, the closest drain is located approximately 60 feet to the west, the pumps to the water treatment plant and storm water retention pond would be turned off. Shutting down the pumps would allow the oil to be captured within the facility's storm water drains. Once the pumps are turned off, appropriate spill equipment will be used to remove all oil from within the storm water drainage system. If an oil spill reaches the storm water drainage system during a rain event and it is not feasible to shut down the pumps, all storm

water will be pumped to the storm water retention pond. The storm water retention pond has a capacity of approximately 2.3-million gallons. This large capacity should allow sufficient time, during a large rain event, for the oil to be properly removed from the storm water pond before it reached full capacity, at which time the storm water will be pumped to the water treatment plant.

330-gallon Flocculent

The flocculent is an anionic polymer. It is stored in 330 gallon plastic drums which are protected by a metal cage that surrounds the drums. These drums are delivered by a supplier, and they are placed inside the PAC center over a spill pallet. When the flocculent is needed for waste water treatment, a drum is placed inside a room in the Sewer metering building on top of a spill prevention metal structure. In that room, the flocculent is contained during its use.

Because of the containment of the room and the best management practices, the potential for a leak to have an impact on the environment is minimal. If a leak or spill were to occur, it would stay within the boundaries of the facility. In addition, instructions on how to handle a spill are provided with every drum.


2700 S Indiana St, Vernon, CA 90058
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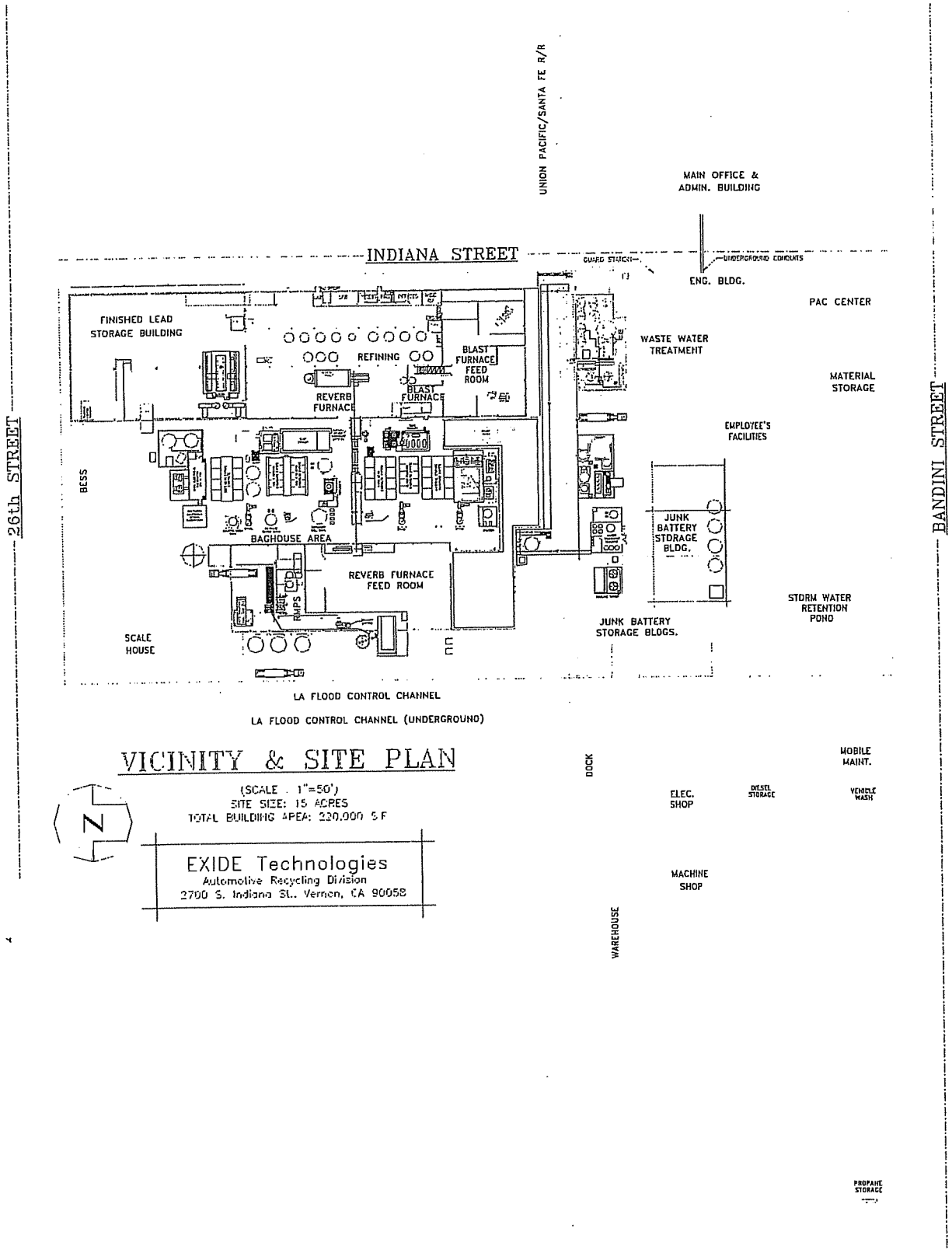

VICINITY & SITE PLAN

(SCALE 1"=50')
SITE SIZE: 15 ACRES
TOTAL BUILDING AREA: 220,000 S.F.

EXIDE Technologies
Automotive Recycling Division
2700 S. Indiana St., Vernon, CA 90058

TABLE 1
INVENTORY OF PETROLEUM PRODUCTS

Table 1 Inventory of Petroleum Products	Completed by: Nicolas Serieys		
	Title: Environmental Health and Safety Manager		
	Date: May 2015		
Material	Quantity (units)	Location	Description of Material Management Practice
Flocculant	330 gallons	Wastewater Treatment plant	330 gallon plastic tote. Labeled and covered from precipitation.
Diesel Fuel	2,000 gallons	Next to Mobile Maintenance Bldg	The AST is double walled and has a leak detection system.
Hydraulic Fluid (drums)	Approximately 440 gallons	Mobile Maintenance Bldg & PAC Center Bldg 3	55-gallon drums sealed, labeled, and placed on spill pallets.
Transmission Fluid (drum)	155 gallons	Mobile Maintenance Bldg	55-gallon drum sealed, labeled, and placed on spill pallets.
Lubricating Oils (tanks)	1200 gallons	Mobile Maintenance Bldg & PAC Center Bldg 3	Tanks are labeled and covered from precipitation. The area is constructed with an in-ground, epoxy coated trench to contain accidental spills or releases.
Grease (drum)	70 gallons	Mobile Maintenance Bldg	35-gallon drum sealed, labeled, and placed on a spill pallet.
Spent Oils (drums)	Approximately 275 gallons	Outside Mobile Maintenance Bldg	55-gallon drums of spent oil are stored outside the Mobile Maintenance Building. All drums are sealed, labeled, covered, and placed on spill pallets.

Mobile Maintenance Building - 55-Gallon Drums

The 55-gallon drums located inside the Mobile Maintenance Building are all placed on spill pallets with sufficient capacity to contain the entire contents of a 55-gallon drum. Because of proper secondary containment for the drums, the potential for a leak to have an impact on the environment is minimal. Should a leak or spillage occur, the spill pallets would act as the secondary containment for the drums. If the spilled material breaches the secondary containment of the spill pallet, other spill equipment (e.g., absorbent socks) will be selected to contain and clean up the spill before it migrates outside the Mobile Maintenance Building. If the spilled material is able to migrate outside the containment of the Mobile Maintenance Building, it would flow approximately 60 feet toward the east before reaching the facility's storm water drains. If the spill enters the storm water drainage system, the procedures outlined in the above paragraph will be implemented.

Mobile Maintenance Building - Small Tanks

There are five tanks located in a small building adjacent to the Mobile Maintenance Building. Two tanks have the capacity of 220 gallons each and three have the capacity of 110 gallons each. All five tanks contain either motor oil or hydraulic fluid. All of tanks are properly labeled and are protected from precipitation.

A 389-gallon capacity, epoxy coated, in-ground trench that spans the entire length of the entrance of the small building provides secondary containment for accidental spills or releases. Any accumulated leaks or spills will be removed manually and collected in 55-gallon drums.

Should a leak or spill occur, spill equipment will be used to contain and clean up all spilled materials. If the spilled material migrates outside the containment of the small building and past the containment trench, it would flow approximately 30 feet toward the east before it would enter the storm water drainage system. If the spill enters the storm water drainage system, the procedures outlined in the 2,000-gallon AST section will be followed for proper removal from the system.

55-Gallon Drums Outside the Mobile Maintenance Building

The 55-gallon drums located outside the Mobile Maintenance Building are placed on spill pallets with sufficient capacity to contain the entire contents of a 55-gallon drum. To protect the drums from contact with precipitation, spill pallets are covered with either a hinged hard cover or pallet tarps. Because of proper secondary containment, the potential for a drum to leak and have an impact on the environment is minimal. If a leak or spill were to occur, the spill pallets would capture the material. If the spilled material breaches the secondary containment of the spill

pallet, it would flow approximately 50 feet towards the east before it would enter the storm water drainage system. Prior to it entering the drainage system, other spill equipment (e.g., absorbent socks) would be used to try and contain the spill. If the spill enters the storm water drainage system, the procedure outlined in the 2,000-gallon AST section will be followed for proper clean up.

6.3 Significant Spills and Leaks

Significant spills are defined as:

- Releases of oil in harmful quantities under 40 CFR Part 110.3 (see **Section 4.0**).

- A release, as used in the above paragraph, is defined to include any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

No known significant spills or leaks of oil have occurred at the facility.

A worksheet has been included as **Attachment 1** in this plan to document any spills or leaks that may occur in the future. The worksheet will facilitate the record keeping and reporting, if necessary, of significant spills at the plant. Refer to **Section 4.0** for release reporting requirements.

7.0 SPILL PREVENTION AND RESPONSE PROCEDURES

This section outlines the steps required to identify and characterize potential spills, how to eliminate or reduce spill potential, and how to respond if a spill should occur.

7.1 Identification of Potential Spill Areas

A potential spill area at the facility is the area where the AST Vault Tank is located. There is a potential for spillage during loading/unloading of diesel fuel. If any spillage occurs, the spill equipment will be used to clean up the area immediately. If the spill cannot be contained prior to it reaching the storm water drainage system, the procedures outlined in **Section 6.2** should be followed.

Another potential spill area is the Mobile Maintenance Building. There is a potential for spillage during loading/unloading of product from the 55-gallon drums or the small storage tanks. If any spillage occurs, the spill equipment will be used to clean up the area immediately. Any spillage collected in the secondary containment trench and sump system is manually removed and placed in 55-gallon drums. If the spill cannot be contained prior to it reaching the storm water drainage system, the procedures outlined in **Section 6.2** should be followed.

7.2 Measures Taken to Prevent Spills

The causes for a release in the Vault Tank area are: (1) a faulty connection, either where the unloading line is connected to the tank truck or to the tank fill port; (2) leaving drain valves open; or (3) not disconnecting the line prior to vehicle departure. Depending upon response times, the stage of unloading, and the location/nature of the rupture, the release can be minimal or severe.

The causes for a release in the Mobile Maintenance Building are a faulty connection from the 55-gallon drum or small storage tanks to the dispensing line, or improper operation of the dispensing apparatus.

The following steps are taken to ensure that a minimal amount of material will be lost to the environment and/or enter the storm water drainage system.

- Specific unloading procedure are posted at the Vault Tank unloading area to ensure all appropriate steps are taken for making a sound connection. These procedures will be made available to the driver delivering the fuel.

- Vehicle wheels must be chocked before unloading fuel.

- All unloading operations will be monitored by facility personnel.

- Spill containment devices (e.g., absorbent materials) will be available to prevent released material from entering the storm water drainage system.
- All released material will be cleaned up immediately, including minor amounts of material that leak from the connections.

7.3 Spill Response Plan

The facility has established a Spill Response Team with an appointed leader, the Spill Response Coordinator, that is responsible for implementing the spill response plan. In the event that a release occurs, the Spill Response Coordinator will be notified immediately and actions taken to minimize migration of the spill.

Adequate spill response equipment (e.g., absorbent pigs) is available to the team for containing and cleaning up the spill. **Table 2** displays the location of spill response equipment. Spill team members are instructed to immediately attempt to stop the source of the spill/leak and prevent the spilled material from migrating.

TABLE 2
SPILL RESPONSE EQUIPMENT AND LOCATIONS

Spill Response Equipment	Location
Kit Containing:	Mobile Maintenance Building
	26th Street Scale House
	Near Bin 103
	Old PAC Building

The following steps will be taken in the event of an emergency release:

1) The Spill Response Coordinator (Environmental Manager) will be contacted, either by the operator or the operators supervisor.

2) If possible, the source of the release will be eliminated. For example, if a tank truck is being emptied by a pump and experiences a rupture or leak, the pump will be shut off.

3) Absorbent socks or pigs, or spill absorbent material will be used to prevent the release from migrating.

4) The amount of material released will be estimated. The Spill Prevention Team Leader will determine if the spill needs to be reported to the regulatory authorities.

5) All released material will be cleaned up as soon as possible using appropriate equipment.

6) The material will be disposed off-site at an appropriate disposal facility.

8.0 BEST MANAGEMENT PRACTICES

Best management practices (BMPs) are measures taken at the facility to prevent or mitigate oil pollution in the environment. BMPs are broad ranging and may include processes, procedures, human actions, or construction. BMPs are aimed at preventing spills and similar environmental incidents by stressing the importance of management and employee awareness of potential spill situations.

8.1 Good Housekeeping

The types of good housekeeping measures implemented in an effort to lessen the impact that an oil spill will have on the environment are summarized in **Table 3**.

TABLE 3
GOOD HOUSEKEEPING PRACTICES

Good Housekeeping Practices	Description of Actions Taken
Operation and Maintenance	Al spillage is promptly removed. Where it is impractical to constantly remove spillage, spillage is contained in the immediate area.
	Equipment is routinely inspected to make sure it is in working order.
	The importance of spill cleanup procedures is communicated to employees through safety meetings.
Material Storage Practices	Adequate aisle space is provided and all 55-gallon drums are placed on spill pallets to facilitate material transfers, inspections, and containment.
	Spill pallets are covered (hard or soft covers) to prevent contact with precipitation.
	Containers of materials are stored away from direct traffic routes to prevent accidental spills.
	Containers are stacked according to manufacturer's instructions.
Material Inventory Procedures	A up-to-date inventory and Material Safety Data Sheets (MSDSs) for all oils are maintained at the facility.
	All containers are labeled with the name of the material, expiration date, and health hazards.
	Storage areas with oils have been specifically designed to contain spills.
Employee Participation	Information on good housekeeping practices is distributed during employee training sessions.
	Good housekeeping measures are discussed at employee meetings.

8.2 Preventive Maintenance and Inspections

The facility's preventive maintenance and inspection program includes the timely inspection and maintenance of spill control structures, storage tanks, all valves and pipelines, and the loading/unloading connections.

Visual Inspections are conducted monthly. The inspections follow the schedule provided as **Attachment 2**. Completed checklists are stored in the Environmental Manager's Office. The following areas are inspected:

- The 2,000 gallon AST and its immediate area.
- Inside and outside area of Mobile Maintenance Building where 55-gallon drums and small storage tanks are located.
- Containment trench.
- All other oil storage locations.
- Spill response equipment.

Preventative maintenance is conducted in a timely manner based upon the findings of the inspections. Records are maintained of all inspections, problems found, actions taken, the date the action is finalized, and the name of the person responsible for the action. The records are maintained for three years in the Environmental Health and Safety Manager's Office.

8.3 Employee Training

Employee training programs are instituted at the facility to inform employees of the components and goals of the SPCC plan. New employees receive initial training prior to beginning their work assignment that include in-depth pollution prevention issues. All operating personnel are instructed in the operation and maintenance of equipment to prevent the discharge of oil and applicable pollution control laws, rules, and regulations. Thereafter, training is provided at the monthly safety committee meetings attended by all facility employees and annually during refresher training courses. The monthly safety meetings address:

- Any environmental/health and safety incidents.

- Brief reminders of good housekeeping, spill prevention and response procedures, and material handling practices.
- Any changes to the SPCC plan.
- Any new management practices.

The annual refresher course addresses:

- Good housekeeping
- Spill prevention and response procedures
- Materials handling and storage

The topics covered in the employee training program concerning spill prevention are provided in **Table 4**.

TABLE 4
EMPLOYEE TRAINING PROGRAM TOPICS

General Topic	Points Covered
Good Housekeeping	Review and demonstrate basic cleanup procedures.
	Clearly indicate proper disposal locations.
	Remind employees of materials handling procedures.
	Be sure employees know where routine cleanup equipment is located.
Spill Prevention and Response	Clearly identify potential spill areas and drainage routes.
	Familiarize employees with past spill events - why they happened and the environmental impact.
	Remind employees of potential spill areas, emergency contacts (Spill Response Coordinator), and telephone numbers.
	Conduct drill on spill cleanup procedures.

General Topic	Points Covered
Materials Handling and Storage	Be sure all employees are aware of hazardous materials and where they are stored.
	Point out container labels.
	Explain recycling practices.
	Familiarize employees of proper storage and covering procedures.
	Demonstrate how valves are tightly closed, drums properly sealed, and how to inspect for drum integrity/leaks.
	Familiarize employees with the unloading procedures.

Records of the topics discussed during employee training, as well as those employees attending each session, are maintained in the Environmental Health and Safety Managers office.

8.4 Security

The facility is operational 24 hours/day, 365 days/year, and is never left unattended. The property is fully fenced off. The fill port of the Vault Tank is securely capped and locked when not in use. All 55-gallon drums and small storage tanks are securely fastened and properly labeled.

Facility lighting is installed to ensure spills or leaks, occurring during hours of darkness, are discovered both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.), and to prevent spills occurring through acts of vandalism. Unloading of material is only performed during daylight hours.

9.0 ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

Qualified personnel from the Spill Prevention Team will conduct an annual comprehensive site evaluation. The purpose of the evaluation is to:

- Determine the effectiveness of the plan.

- Update the plan if any change in facility design, construction, operation or maintenance, which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shore lines, is identified.

The comprehensive site compliance evaluation is conducted annually under the supervision of the Spill Prevention Team Leader. The evaluation will be based upon the following activities being performed:

- Inspection of petroleum storage areas for evidence of pollutants. The inspection will follow a revised monthly inspection (Checklist 1 in **Attachment 3**).

- Evaluation of the effectiveness of procedural BMPs. For example, good housekeeping, training, preventative maintenance, and inspections. (Checklist 2 in **Attachment 3**)

- Revision of the plan as needed within two weeks of inspection, and implementation of any necessary changes within six weeks of the inspection. A revision checklist, Checklist 3, for implementing any changes is provided in **Attachment 3**.

- Preparation of a report which identifies the date of inspection and personnel who conducted the inspection and that summarizes inspection results and follow-up actions. A Reporting Form for consolidating the information from the evaluation is provided in **Attachment 4**.

- The annual report will be maintained in **Attachment 4**. All backup documentation (Checklists 1, 2, and 3) will be maintained in **Attachment 3**.

10.0 RECORD KEEPING AND REPORTING

A record keeping system has been set up at the facility for documenting the following:

- Spills, leaks, and discharges of oil in harmful quantities (**Attachment 1**).
- Inspections/preventative maintenance (**Attachment 2**).
- Annual comprehensive site compliance evaluations (**Attachment 3**).
- Annual comprehensive site compliance evaluation reports (**Attachment 4**).
- Monthly spill materials inspection sheet (**Attachment 5**).
- Training lesson plan (**Attachment 6**).

11.0 FEE SUBMISSION

Beginning on or before July 1, 1990 and on or before July 1 of every two years thereafter, the owner or operator of the tank facility shall file with the State Water Resources Control Board a storage statement that identifies the name and address of the tank facility, a contact person for the tank facility, the total storage capacity of the tank facility, and the location, size, age, and contents of each tank that exceeds 10,000 gallons in capacity and holds a substance containing at least five percent petroleum.

Each storage statement submitted should be accompanied by a fee in accordance with the following schedule:

Total Tank Facility Storage Capacity of Petroleum	Per Facility Fee
Less than 10,000 gallons	$100
10,000 - 100,000 gallons	$200
100,001 - 1,000,000 gallons	$400
1,000,001 - 10,000,000 gallons	$1,600

Each storage statement and fee payment should be submitted to:

State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95801

Date: May 2015

ATTACHMENT 1

LIST OF SIGNIFICANT SPILLS AND LEAKS

Date: May 2015

RELEASE OR SPILL NOTIFICATION REPORT

List of Significant Spills and Leaks	Facility Name:	
	Facility Address:	
	Date:	Time:
	Completed by	
Instructions: Record on this form all significant spills or releases of oil that occur at the facility.		
Definition: Significant spills include, but are not limited to, releases of oil in excess of harmful quantities.		
Date of Spill or Leak:		
Location as Indicated on the Site Map:		
Circle one: Spill Leak Both		
Type of Material:		
Quantity:		
Media Impacted (air, soil, water):		
Source (if known):		
Reason for Spill or Leak:		
RESPONSE		
Amount of Material Recovered:		
Preventative Measures Taken:		

Date: May 2015

ATTACHMENT 2

MONTHLY INSPECTION CHECKLIST

Date: May 2015

MONTHLY INSPECTION CHECKLIST

EXIDE Technologies.				Shift No: Reviewed By: Title: Date:
Plant: Vernon, CA	Inspector:			Date:
Note: For any item answered "No" describe in right hand column.				
Item	N/A	No	Yes	Comments/Resolution of Problem
MATERIAL STORAGE TANKS				
Are tanks free of rust?				
Area all pumps, valves, hoses, etc. intact and operating properly?				
Is containment trench free of liquids?				
Is secondary containment intact?				
DRUM STORAGE AREA				
Are drums stored on spill pallets and covered?				
Are any drums leaking?				
Are drums stored according to manufacturers recommendations?				
Are drums closed/sealed when not in use?				
Is secondary containment intact?				
Are drums properly labeled?				
TANK AND DRUM LOADING/UNLOADING AREAS				
Any signs of previous spills?				
Are the loading/unloading connections working properly?				
SPILL RESPONSE EQUIPMENT				
Is spill response equipment at designated storage areas?				
Have used equipment/materials been replaced?				
FACILITY LIGHTING				
Is facility lighting sufficient to detect leaks/spills?				

Date: May 2015

ATTACHMENT 3

ANNUAL COMPREHENSIVE SITE

COMPLIANCE EVALUATION

Date: May 2015

CHECKLIST 1
COMPREHENSIVE SITE COMPLIANCE EVALUATION INSPECTION

EXIDE Technologies.				Shift No: Reviewed By: Title: Date:
Plant: Vernon, CA	Inspector:			Date:
Note: For any item answered "No" describe in the right hand column.				
Item	N/A	No	Yes	Comments/Resolution of Problem
MATERIALS STORAGE TANKS				
Are tanks rusting, leaking, or showing signs of structural failure?				
Area all pumps, valves, hoses, etc. intact and operating properly?				
Is containment trench free of liquids?				
Is secondary containment intact?				
DRUM STORAGE AREA				
Are drums stored on spill pallets and covered?				
Are any drums rusting or leaking?				
Are drums stored according to manufacturers= recommendations?				
Are drums closed/sealed when not in use?				
Is secondary containment intact?				
Are drums properly labeled?				
TANK AND DRUM LOADING AREAS				
Any signs of previous spills?				
Are the loading/unloading connections working properly?				
SPILL RESPONSE EQUIPMENT				
Is spill response equipment at designated storage area?				
Have used materials been replaced?				
FACILITY LIGHTING				
Is facility lighting sufficient to detect leaks/spills?				

Date: May 2015

CHECKLIST 2
COMPREHENSIVE SITE COMPLIANCE EVALUATION
PROCEDURAL BMP EVALUATION

EXIDE Technologies.				Reviewed By: Title: Date:
Plant: Vernon, CA	Inspector:			Date:
Best Management Practice	Goal	Effective		Recommendations
		Yes	No	
Good Housekeeping	Areas are kept clean (no residual spill material).			
	Storage areas are orderly with containers labeled and in good condition.			
	MSDS record keeping is maintained.			
	Spills can be contained within the building or within spill pallets.			
Preventative Maintenance	Inspection of equipment/grounds performed regularly.			
	Records of corrective actions taken, based upon inspections, are maintained.			
Spill Protection and Response	Spill response equipment is adequate.			
	Procedures are current with the appropriate team members identified.			
Employee Training	Employees are knowledgeable of good housekeeping practices.			
	Employees are knowledgeable of the Spill Prevention and Response Procedures.			

Date: May 2015

EXIDE Technologies.				Reviewed By: Title: Date:
Plant: Vernon, CA	Inspector:			Date:
Best Management Practice	Goal	Effective		Recommendations
		Yes	No	
	Employees are knowledgeable of the material handling procedures.			

Date: May 2015

CHECKLIST 3
COMPREHENSIVE SITE COMPLIANCE EVALUATION
REVISION OF THE SPCC PLAN

Date of Inspection:
Revision must be made by: (12 weeks from date of inspection)

Section	Potential Revision	Revision Required (Yes/No)	Location and Type/Description of Revision Made and the Date Implemented
Quick Reference Table	Has the Emergency Contact(s) changed?		
Spill Prevention Team	Are the listed team members and their responsibilities still accurate?		
Potential Pollution Sources	Does the site map reflect the current conditions of the site?		
	Have there been any significant spills and/or leaks (see Attachment 1)?		
	Other.		
Best Management Practices (based upon Checklists 1, 2, and 3)	Have the good housekeeping practices been modified?		
	Have the preventative maintenance and inspections procedures been modified?		
	Have the Spill Prevention and Response Procedures been modified?		
	Has employee training been modified?		
	Other.		
Keeping Plans Current	Update table if changes are made.		

Date: May 2015

ATTACHMENT 4

ANNUAL COMPREHENSIVE SITE COMPLIANCE

EVALUATION REPORT

Date: May 2015

Instructions for the Site Compliance Evaluation Reporting Form

Heading and Introduction

Fill in the period for which this evaluation covers in the appropriate blank. Provide the personnel that completed **Checklist 1** through **Checklist 3**. The information on these checklists will be used in completing this report.

Facility Changes

In this section, describe any facility changes at the site that may affect the potential for an oil spill to occur. For example: "During the past year, concrete containment was constructed around the unloading connections."

If no changes were made, state "no significant changes were made to the facility in the past year."

Significant Spills

Describe the date, location, quantity, material, and remedial measures for any significant spill that occurred in the previous year. Also specify any other documentation (e.g., reporting) associated with the spill and document location. If no spill occurred, state, "No significant spill occurred in the past year."

Aboveground Storage Tanks and Drums

If the quantity, type, or location of an aboveground storage tank or 55-gallon drum, described in **Table 1** have changed, modify **Table 1** and note the revision date and reason for revision in the Keeping Plans Current/Distribution table in **Section 2.0**. The text of this section would then say, "Changes to the aboveground storage tank on the site have been made to **Table 1**. The changes are . . ." If no change is necessary, state, "There was no appreciable change in the quantity, type, or location of the aboveground storage tank at the site."

BMPs (Best Management Practices)

Note the date, location, and type of new BMPs implemented during the year. If no BMPs were implemented this year state, "No BMPs were added or modified at the facility this year."

Additional Comments

Insert any other comments that you feel are appropriate for this report.

Date: May 2015

Annual Comprehensive Site Compliance Evaluation Report for the Period
from / / to / /

This evaluation is designed to determine the effectiveness of the plan.

The information in the Comprehensive Site Compliance Evaluation Report is a compilation of the information obtained from weekly inspections and **Checklist 1** through **Checklist 3**. The following personnel are responsible for completing the checklists for this annual report:

Inspection (**Checklist 1**): _____

_____

Evaluation (**Checklist 2**): _____

_____

Revisions (**Checklist 3**): _____

_____

Facility Changes

Significant Spills

Aboveground Storage Tanks & Storage Drums

Date: May 2015

BMPs

Additional Comments

Date: May 2015

ATTACHMENT 5

MONTHLY SPILL CLEANUP MATERIALS

INSPECTION SHEET

Date: May 2015

SPILL CLEANUP MATERIALS INSPECTION SHEET

Last Inspection Date:_____ Equipment Test Date:
Inspection Frequency: Monthly Approval Date:

Materials Inventory	Status
1. Universal spill kits	
2. Spill response absorbent socks, pigs, and pads	
3. Loose petroleum sorbent	
4. Shovel	
5. Empty 55-gallon drum	
6. Spill pallets	
7.	
8.	
9.	
10.	
11.	
12.	

NOTE: Maintain reports of the inspection for at least three years.

Date: May 2015

ATTACHMENT 6

TRAINING LESSON PLAN

Date: May 2015

SPCC TRAINING PLAN

Training Objective: To instruct personnel in the operation and maintenance of equipment to prevent the discharge of oil, pollution control laws, rules and regulations.	
Attendees	**Sequence of Activities (Guide)**
	1. Introduce the SPCC rules and Oil Pollution Prevention Act 2. Review Site emergency response information 2.1 Notification 2.2 Equipment 2.3 Personnel 2.4 Evacuation plans 2.5 Coordinator=s duties 3. Discuss hazard evaluation conducted for site 3.1 Hazard identification 3.2 Vulnerability analysis 3.3 Analysis of the potential for a spill 3.4 Facility spill history 4. Describe possible discharge scenarios 4.1 Small and medium discharges 4.2 Worst case discharge 5. Explain site discharge detection systems 5.1 Discharge detection by personnel 5.2 Automated discharge detection 6. Conduct mock drill - demonstrate how to implement plan 6.1 Response resources for small, medium, and worst case spill 6.2 Disposal plans 6.3 Containment and drainage planning
Absentees and Review Date	**Administrative Instructions:**
	Class Time: Personnel Required: Equipment Required: References:

NOTE: Maintain this record until closure of the facility or for at least 3 years from the date the employee last worked at the site.

Date: May 2015

SPCC PERSONNEL TRAINING LOG

Name	Response Training		Prevention Training		Comments
	Date	Time	Date	Time	

NOTE: Maintain this record until closure of the facility or for at least 3 years from the date the employee last worked at the site.

ATTACHMENT D

CRISIS MANAGEMENT PLAN / CONTINGENCY PLAN
SECONDARY LEAD SMELTER

Prepared for

2700 South Indiana St.
Vernon, California, 90058
(323) 262-1101, Fax (323) 262-0642

Original: February 2005
Revised: April 2006

Revised: January 2009

Revised: November 2009

Revised: March 2010

Revised: September 2011
Revised by Advanced GeoServices

Revised April 2012
Collaborative Revision by Advanced GeoServices and Exide Technologies

Revised January 2013
Revised by Advanced GeoServices

Revised March 2013
Revised by Advanced GeoServices

Revised August 2014
Revised by Advanced GeoServices

Revised February 2015
Revised by Advanced GeoServices

Revised April 2015
Revised by Advanced GeoServices

Revised May 2015
Revised by Advanced GeoServices

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Response Guide 3E	General Liquid Spills	RG-16
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Response Guide 4A	Lead Paste / Desulfurized Mud Spill	RG-22
Response Guide 4B	Flue Dust Spill	RG-23
Response Guide 4C	Lead-Acid Battery Electrolyte Spill	RG-26
Response Guide 4D	Waste Lead Acid Battery Spill	RG-27
Response Guide 5A	Power Failures	RG-28
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APPENDICES

Appendix A Emergency Response Action Package
Appendix B Emergency Response Equipment
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Appendix E Administration Forms
Appendix F Arrangements With Local Authorities
Appendix G Revisions Log

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1.0 INTRODUCTION

The Exide Technologies Vernon Facility is a secondary lead recycling plant which recovers lead primarily from spent lead-acid automotive batteries as well as other lead-bearing materials. This plan defines the actions to be taken in the event of any emergency which might arise at the plant that could cause or result from the release or threatened release of hazardous materials or hazardous wastes.

This Crisis Management Plan/Contingency Plan is required by the State of California which has adopted the Federal RCRA Hazardous Waste Regulations. As a hazardous waste storage and treatment facility, the Vernon facility is required by the California Environmental Protection Agency (CA EPA), to meet the following requirements:

Preparedness and Prevention: Title 22 CCR Sections 66264.30-37

Contingency Planning and Emergency Procedures: Title 22 CCR Sections 66264.50-56

Personnel Training: Title 22 CCR Section 66264.16

Release or Threatened Release Reporting: 26 CCR 19-2703 & 19-2705

OSHA Regulations: 29 CFR 1910.120

This plan contains the requirements and methods that are used to meet personnel training requirements. However, the personnel training program details are not covered in this document.

The referenced regulations require Vernon to minimize the possibility of fire, explosion, or any release of hazardous waste or hazardous materials to air, soil, or surface water which could significantly impact human health or the environment. There are four major components of the regulations regarding Contingency Plans:

- **Preparedness** — The items related to operating and maintaining a plant with the required communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment.

- **Prevention** — Operating procedures that significantly reduce the potential of an emergency that could impact human health or the environment.

- **Contingency Plan** — The procedures performed when the plan is implemented to respond to fire, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous materials to air, soil, or surface water at the

plant including internal and external support from personnel and other authorities, role of the emergency coordinator, evacuation plan, and administration of the plan.

- **Emergency Procedures** — The specific site emergency procedures that are used to respond to minor emergencies, as well as, an imminent or actual emergency situation that requires the activation of the contingency plan including determination of the source or cause of the emergency, assessment of the potential impacts, notification of authorities relative to impacts associated with the emergency, mitigation of emergency, restoration of routine operations, and submittal of a written report after the incident.

The Vernon facility receives spent (used) lead-acid batteries and other lead bearing materials and recycles them to recover lead and polypropylene. The general classes and types of emergencies that could occur at this industrial plant are the following:

- Fires and explosions
- Hazardous material/waste spills and overflows
- Utility failures - electrical failure, gas leak/service interruption, telephone outage, water/sewerage overflows
- Serious health injury - physical injuries, heart attacks, strokes, and fatalities
- Natural disasters - windstorms, earthquakes, and floods
- Others including public disturbances, bomb threats, vandalism, and sabotage

The Vernon facility management is dedicated to providing the sufficient resources necessary to minimize the potential for fire, spills, or any unplanned sudden or non-sudden release or threatened release of hazardous material/waste to the air, soil, or surface water which could significantly impact human health and the environment. The most likely and reasonable emergency scenarios that can occur at the plant are hazardous material/waste spills, utility failures including electrical failure, gas leak/service interruption, water/sewerage overflows, fires and explosions, and earthquakes. This facility handles hazardous materials/wastes onsite. The reportable spill quantities for these materials are listed below in **Table 1**. **Appendix D** contains material safety data sheets (MSDS) for these compounds and information on the safe handling of lead.

Corporate Management requires plant managers to plan for emergencies by conducting personnel training on specific response procedures that can, when performed, minimize the threat to human health and the environment. Corporate policy also mandates that facility managers conduct safety inspections each month so that deficiencies can be identified and resolved. This monthly safety inspection checklist as well as forms for reporting spills, lost time, and other health and safety incidents are located in **Appendix E**.

This Crisis Management/Contingency Plan will address the spectrum of potential emergency events but will provide a greater depth of coverage for the more probable emergency scenarios.

Table 1: Hazardous Materials/Wastes Handled Onsite and Reportable Spill Quantities

Material	Constituents of Concern	Reportable Quantity [B]	Estimated Quantity of Spilled Material to Reach RQ[A]
Lead and Lead Compounds (Dust)[A]	Lead	10 lb	10 lb
Lead-Bearing Scrap (Dust)[A]	Lead Arsenic Cadmium Antimony Copper	10 lb 1 lb 10 lb 5000 lb 5000 lb	10 lb / Lead fraction 1 lb / Arsenic fraction 10 lb / Cadmium fraction 5000 lb / Antimony fraction 5000 lb / Copper fraction
Secondary Lead Smelting Furnace Flue Dust	K069 Listed Waste	10 lb	10 lb
Lead-Acid Batteries (spilled/leaked contents)	Lead Lead Corrosive Waste Sulfuric Acid	10 lb 10 lb 100 lb 1000 lb	10 lb lead paste ½ gallon electrolyte if >5 mg/L lead 6.5 gallons electrolyte if pH < 2 65 gallons electrolyte (15.3 lb/gal)
Spent Lead-Acid Battery Electrolyte	Lead Corrosive Waste Sulfuric Acid	10 lb 100 lb 1000 lb	½ gallon if lead content >5 mg/L 6.5 gallons if pH < 2 65 gallons (15.3 lb/gal)
Lead Paste / Desulfurized mud	Lead	10 lb	10 lb
Sulfuric Acid	Sulfuric Acid	1000 lb	65 gallons (15.3 lb/gal)
Nitric Acid	Nitric Acid	1000 lb	84 gallons (11.8 lb/gal)
Acetic Acid	Acetic Acid	5000 lb	570 gallons (8.75 lb/gal)
Lead Carbonate, $PbCO_3$	Lead	10 lb	12.9 lb (77.54% lead content)
Arsenic (Dust)[A]	Arsenic	1 lb	1 lb
Caustic Soda (Sodium Hydroxide)	NaOH	1000 lb	1000 lb as dry chemical (pellet/flake) 56 gallons of solution (17.8 lb/gal)
Potassium Hydroxide	KOH	1000 lb	1000 lb as dry chemical (pellet/flake)
Acetone	Acetone	5000 lb	757 gallons (6.6 lb/gal)
Methanol	Methanol	5000 lb	757 gallons (6.6 lb/gal)

Material	Constituents of Concern	Reportable Quantity [B]	Estimated Quantity of Spilled Material to Reach RQ[A]
Ferric Chloride	Ferric Chloride	1000 lb	1000 lb as dry chemical 41 gallons in solution (24.2 lb/gal)
Corrosive Hazardous Waste	pH < 2 pH > 12.5	100 lb 100 lb	100 lb 100 lb
Toxic Hazardous Waste [C]	Lead, >5 mg/L Arsenic, >5 mg/L Cadmium, >1 mg/L	10 lb 1 lb 10 lb	10 lb 1 lb 10 lb

[A] If a released material consists of solid particles of antimony, arsenic, cadmium, chromium, copper, or lead with a mean diameter greater than 100 microns (0.004 inches), notification under CERCLA is not required (40 CFR §302.6).

[B] Notifications must be given for each component in a reportable spill for which an RQ is exceeded. (*e.g., a 1000 gallon spill of spent lead-acid battery electrolyte with pH less than 2 and lead content greater than 5 mg/L would be reportable as sulfuric acid, corrosive hazardous waste, and lead-bearing hazardous waste*).

[C] Constituents of concern levels for these materials represent the toxicity characteristic leaching procedure extract concentrations if the waste is a solid, or the actual component concentrations if the waste is a liquid (see 40 CFR §261.24).

Note: Notification to the City of Vernon and the California State Warning Center is required for releases or threatened releases under the Reportable Quantities if they pose a hazard to human health and safety, environment, or property (notification should be made even if the impacts are potential or delayed).

2.0 KEEPING PLAN CURRENT

This contingency plan must be reviewed and immediately amended whenever there is a change in facility design, construction, operation, maintenance, etc., that materially affects the potential for emergencies to occur at this facility or any of the response protocols described herein. The plan shall also be reviewed after each emergency implementation so that it can be modified as necessary to include mechanisms that can prevent a recurrence of the event, update those procedures or protocols that may need improvement, and modify any component that was shown to be ineffective.

At a minimum this contingency plan must be reviewed annually to confirm emergency contacts (emergency coordinators) names and phone numbers, emergency response agency information, emergency contractor information, response equipment lists, etc.

Federal and State regulations require that copies of this contingency plan be distributed to local emergency response agencies and contractors who may be called upon to provide assistance in an emergency. Whenever revisions to the plan are made, copies of the updated information must also be distributed to all holders of the plan. The following table should be used to assist plant personnel in distributing the plan and any revisions. The Revisions Log located at Appendix G should also be completed in order to track all changes/modifications made to this plan.

2.1 Plan Distribution Record

Revision Number	Date	Distribution Information		
		Recipient	Document Provided?	
6	11/11/09	Plant Environmental Manager	YES	
		Plant Manager	YES	
7	3/1/10	Plant Health & Safety Manager	YES	
		Plant Engineering Manager	YES	
		Corporate Environmental Manager	YES	
		City of Vernon Fire & Rescue 4305 Santa Fe Ave. Vernon, CA 90058	YES	
		City of Vernon Police Department 4305 Santa Fe Ave. Vernon, CA 90058	YES	
		Vernon City Environmental Health 4305 Santa Fe Ave.	YES	

Revision Number	Date	Distribution Information		
		Recipient	Document Provided?	
		Vernon, CA 90058		
		Sanitation Districts of Los Angeles County 1955 Workman Mill Rd Whittier, CA 90601	YES	
		California Department of Toxic Substances Control 9211 Oakdale Ave. Chatsworth, CA 91311	YES	
		Los Angeles County USC Medical Center 1200 North State St. Los Angeles, CA 90033	YES	
		White Memorial Medical Center 1720 Cesar E. Chavez Ave. Los Angeles, CA 90033	YES	
		US Health Works; Attention: Pamela Packman 3851 Soto St Vernon, CA 90058	YES	
		US Health Works; Attention: Yvonne Faustinos 3430 Garfield Ave Commerce, CA 90040	YES	
		Advanced Cleanup Technologies, Inc. 18414 S. Santa Fe Ave. Rancho Dominguez, CA 900221-5693	YES	
		Environmental Recovery Services (Enviroserv) 2650 Lime Ave. Signal Hill, CA 90755	YES	
		Advanced GeoServices 1055 Andrew Dr, Suite A West Chester, PA 19380-4293	YES	
Reason for Revision: Change in Industrial Health Care Provider				
8	9/30/11			
9	4/16/2012	Vernon Plant Manager, Health & Safety Manager, HR Manager, Environmental Manager	Yes	
Reason for Revision 9: RCRA Part B Application Changes in Exide personnel, contact information, and vendor information.				
10	1/15/2013	Vernon Plant Manager, Health & Safety Manager, HR Manager, Environmental Manager	Yes	
Reason for Revision 10: RCRA Part B Application. Changes in Exide personnel and contact information.				
11	3/15/13	Vernon Plant Manager, Health & Safety Manager, HR Manager, Environmental Manager	Yes	
Reason for Revision 11: Changes in Exide personnel and contact information.				

Revision Number	Date	Distribution Information		
		Recipient	Document Provided?	
12	8/4/14	Vernon Plant Manager, Health & Safety Manager, HR Manager, Environmental Manager	Yes	
Reason for Revision 12: Changes in Exide personnel and contact information.				
13	2/27/15	Vernon Plant Manager, Health & Safety Manager, HR Manager, Environmental Manager	Yes	
Reason for Revision 13: Changes in Exide personnel and contact information.				
14	4/1/15	Vernon Plant Manager, Health & Safety Manager, HR Manager, Environmental Manager	Yes	
Reason for Revision 14: Changes in Exide personnel, contact information and notification procedures.				
15	5/15/15	Vernon Plant Manager, Health & Safety Manager, HR Manager, Environmental Manager	Yes	
Reason for Revision 15: Changes in Exide personnel and contact information.				

3.0 PREPAREDNESS AND PREVENTION

Vernon is required to maintain and operate the on-site processes in a manner to minimize serious emergencies that can lead to the release or threatened release of hazardous waste or hazardous materials to air, soil, or surface water which could adversely impact human health or the environment. Accidents can and do occur.

Corporate Management requires site managers to personally conduct a safety inspection each month. The items found to be deficient during the safety inspections are required to be followed up and resolved. The Executive Safety Inspection checklist form is located in **Appendix E — Administration Forms**.

The magnitude of an accident can be significantly reduced when the management ensures the following are performed: appropriate planning, development of usable procedures, and training appropriate personnel. The plant management must have an organization that can prepare employees through planning, training, and practice to be prepared to handle assigned roles with respect to emergencies. The plant management must develop procedures to ensure safe operations including material handling, lead production, storage, and shipping.

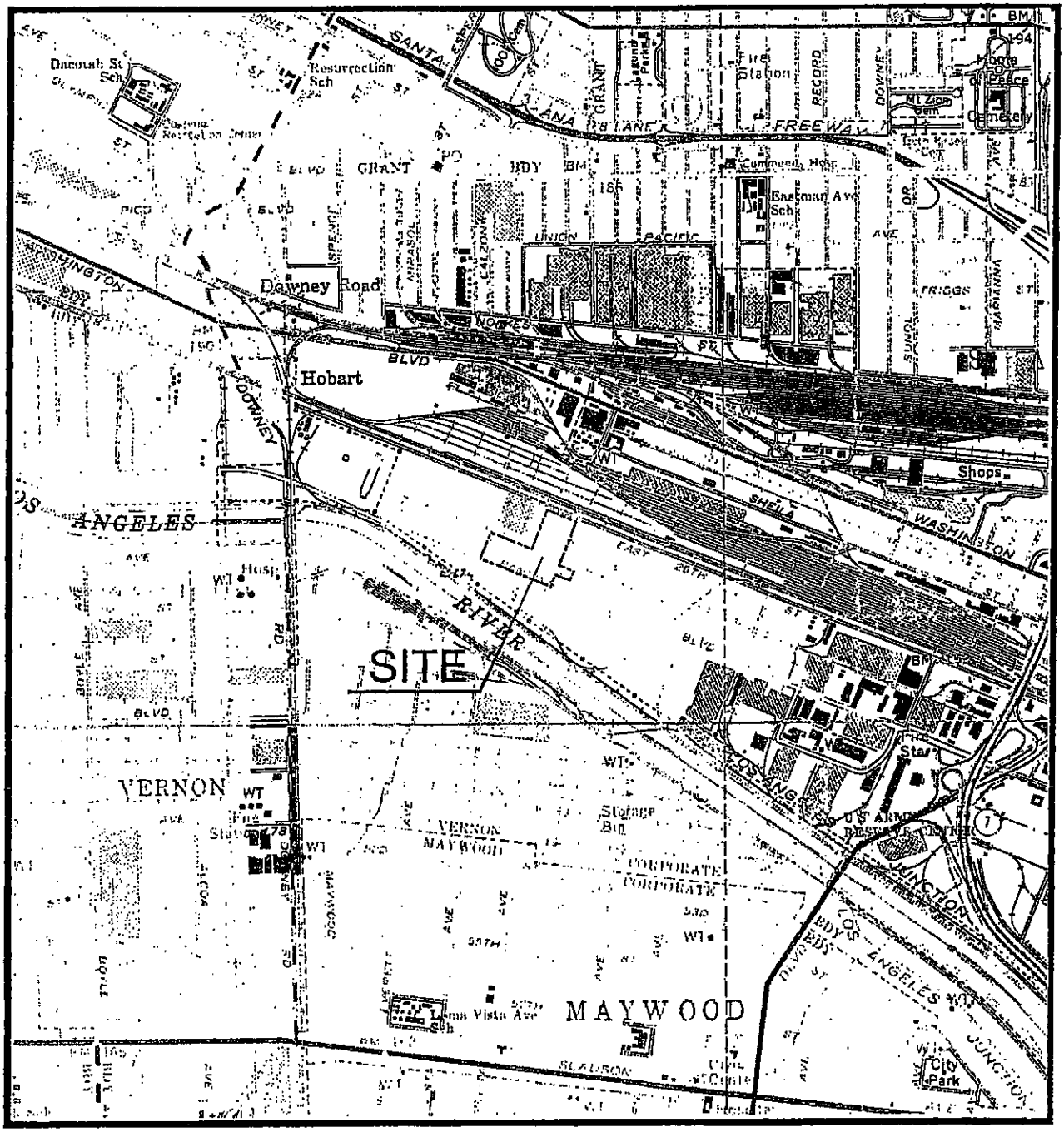
The goal of this plan is to minimize events or conditions that can cause the implementation of the Crisis Management Plan/Contingency Plan. This goal is reflected in plant operations and maintenance procedures for production and emergency equipment.

An action package for emergencies has been created to aid during implementation of the Crisis Management Plan/Contingency Plan. This stand-alone package summarizes the elements of the full contingency plan document and has been designed to be used in the event of an emergency as a set of response action guidelines. **Appendix A** contains a “clean” copy of the Action Package which can be copied to replace a used Action Package.

3.1 Plant Operation, Maintenance, and Required Equipment

The Vernon secondary lead recycling facility recovers lead from automotive batteries and lead-bearing scrap materials. A topographic map showing the location of the plant is presented in **Figure 1**. The site map in **Figure 2** shows the layout and locations of onsite buildings and process areas.

The facility has been designed and constructed, and is maintained and operated to minimize the possibility of fire, explosion, or any unplanned, sudden or non-sudden release of hazardous material/wastes to air, soil, or surface water which could threaten human health or the environment.



SCALE 1:24000

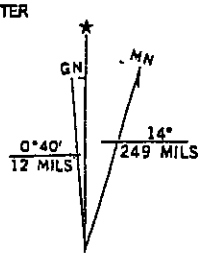
1 1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0.5 0 1 KILOMETER

QUADRANGLE LOCATION

Contour interval: 20 feet
Source: Composite of Los Angeles & South Gate, California, 7.5 Minute Series, U.S.G.S. Topographic Maps



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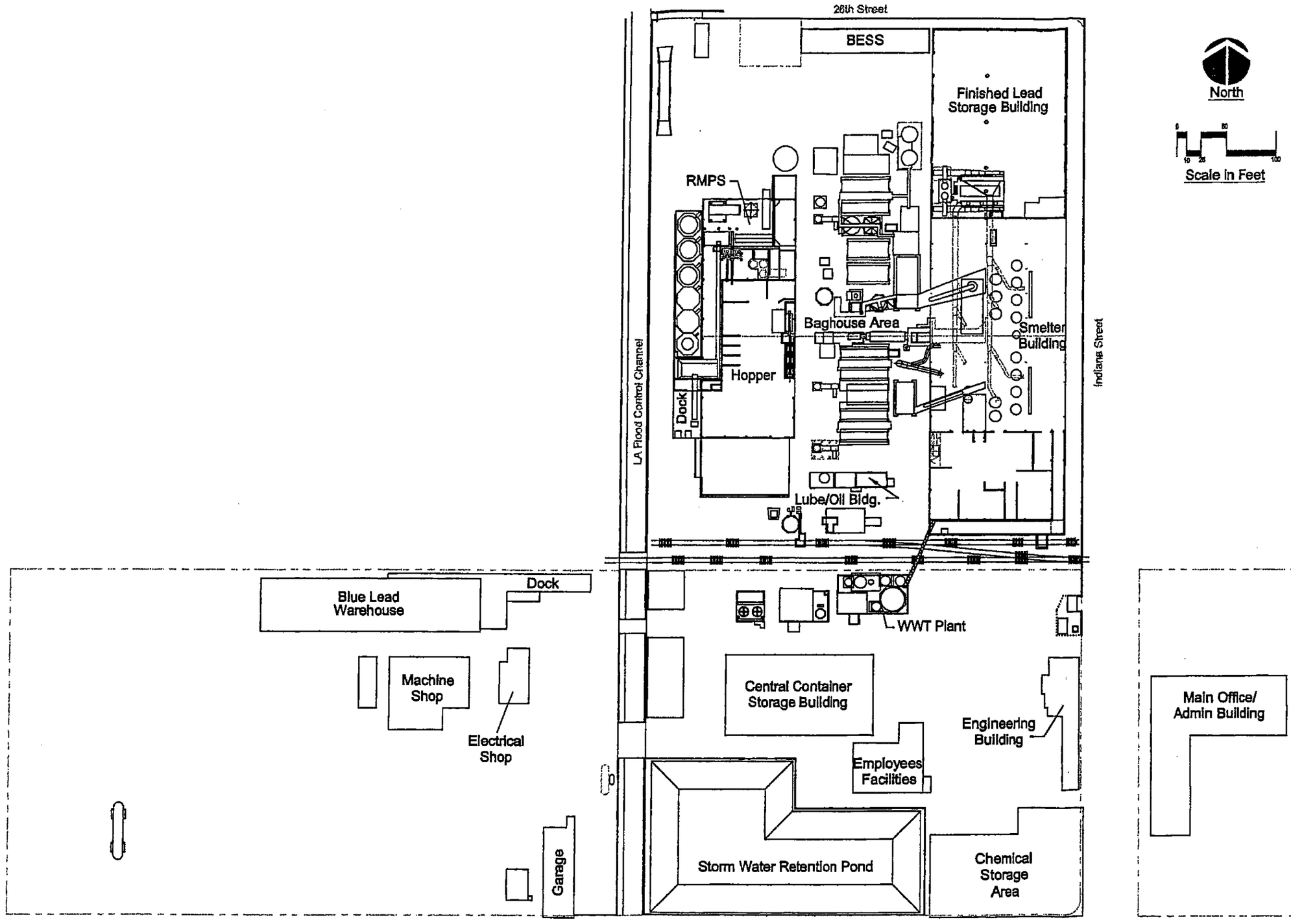
Exide Technologies - Vernon, California

FACILITY LOCATION MAP

FIGURE 1



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Exide Corporation - Vernon, California

SITE LAYOUT

FIGURE 2

A personnel training plan that includes instruction in safe work standards and emergency response training, together with a comprehensive inspection schedule, minimizes the potential for emergency situations. In the event a situation does arise which requires emergency response, the procedures described in the contingency plan will be followed.

The role of the Emergency Coordinator is to direct and manage all of the necessary response actions prior to, during, and after an emergency requiring the activation of the Contingency Plan. The Emergency Coordinator or his designee is responsible for calling to obtain emergency assistance from local police departments, fire departments or local or State emergency response teams when the Contingency Plan is implemented.

The facility is equipped with the following equipment:

(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal to facility personnel). Currently, voice communication is the method employed. The employee first discovering an injury, spill , release or threatened release, fire or explosion, immediately communicates with nearby co-workers and informs the area supervisor.

(b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or emergency response teams. Each department within the plant has a control room. Every control room is equipped with a telephone which is used for internal and external communications. Telephones are maintained at easily accessible locations within the plant including:

- Administrative Building
- Guardhouse
- Laboratory
- Smelting Building
- Refinery
- Garage
- Scalehouse
- Maintenance Shop
- RMPS
-

Additionally, twenty hand-held two-way radios are maintained at the facility. These radios allow internal communication within the plant at all times. The following departments are assigned radios:

- Security
- Shipping
- Receiving
- Baghouse
- Wastewater Treatment
- Laboratory
- Maintenance Supervisor
- Maintenance Mechanical

- Plant Services
- 1420
- Maintenance Electrical
- RMPS

(c) Portable fire extinguishers, fire control equipment (including special extinguishing agents such as foam, inert gas, or dry chemicals), spill control equipment and decontamination equipment. The location, size, and type of fire extinguishers maintained at the facility are along with plant maps showing their locations are presented in **Figure B-1** of **Appendix B**. Emergency eye wash and shower locations are presented in **Figure B-1**. The facility's mobile equipment is listed in **Table B-3**. Equipment from this list may be used for on site emergency response as necessary. **Figure B-1** also indicates the onsite locations of other miscellaneous equipment available for emergency response including:

- On-site fire hydrants (5)
- Off-site fire hydrants (4)
- Fire hoses (7) for general fire fighting
- Spill Kits (5) (small hand tools and materials for spill containment/clean up)
- Soda ash for acid neutralization

Table B-5 lists outside sources of equipment and materials that might be required during an emergency.

(d) Fire protection water is supplied at adequate volume and pressure to supply hose streams, foam producing equipment, automatic sprinklers or water spray systems. The four fire hydrants and the hose reels located onsite are shown on **Figure B-1**.

The location and a physical description of all emergency equipment at the facility and a brief outline of its capabilities is summarized in **Table B-6**.

All communication and alarm systems, fire protection equipment, and spill control equipment are tested and maintained as necessary to assure its proper operation in time of emergency. Inspection of fire extinguishers is performed monthly by an independent contractor.

The facility maintains a basic inventory of first aid supplies, emergency stretches, and associated equipment for minor injuries. In cases of serious injury, the emergency coordinator will call the local emergency medical response team, and direct plant employees to stabilize the injured person waiting for the medical response team.

3.2 Access to Communications or Alarm Systems

All personnel involved in operations where hazardous materials, hazardous wastes, or equipment used for handling these substances are encountered have immediate access for emergency communication through visual or voice contact with another employee. Closed circuit televisions in the control rooms are also used to observe personnel engaged in hazardous operations.

In the unlikely event there is only one employee on the premises while the facility is operating, he/she shall have immediate access to a device, such as a telephone, capable of summoning external emergency assistance.

3.3 Required Aisle Space

Aisle space is maintained during normal operations and allows for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the plant operation in an emergency. Plant traffic patterns are shown in **Figure B-2**.

3.4 Arrangements with Local Authorities

Vernon is required to make an attempt to arrange for response services from the police, local fire departments, emergency response teams, and local Publicly Owned Treatment Works (POTW). These services include response actions and support services during an emergency which requires the activation of the Contingency Plan. The following information must be communicated to the local authorities:

- Physical layout of the plant-location of hazardous materials and hazardous waste operations at the plant.
- Review the properties of the types of hazardous materials/wastes handled at the plant and associated hazards.
- Location of all production areas and/or other areas where people work.
- Entrances and layout of roads inside the plant.
- Evacuation routes for the plant and the assembly areas for personnel.

As appropriate for this facility and the potential need for the services of these organizations, the following arrangements have been made:

(1) Arrangements to familiarize police, fire departments, emergency response teams, and the local Office of Emergency Services with the layout of the facility, properties of hazardous materials/wastes handled at the facility and other associated hazards, places where facility personnel would normally be working, entrances to and traffic patterns inside the facility, and possible evacuation routes;

(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(3) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers;

(4) Arrangements to familiarize local hospitals with the properties of hazardous materials/wastes handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

A copy of the letter sent out to the above described entities is presented in **Appendix F**. Past correspondence with local authorities is available at the plant.

4.0 CONTINGENCY PLAN

The purpose of this Contingency Plan is to provide a plan of actions that can be used in response to emergencies. The objective of implementation of the Contingency Plan is to minimize the hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous material/waste to air, soil, or surface water. This Contingency Plan is designed to meet the regulatory requirements of Title 22 CCR 66264 and 40 CFR 264 Subpart D.

4.1 Contingency Plan Implementation

The procedures contained in this Contingency Plan will be carried out immediately whenever there is a fire, explosion, or release that could threaten human health and the environment. There are minor emergency situations that occur during production and manufacturing operations that may or may not require the activation of this plan.

The release of small quantities of process materials, reagents, or hazardous material/waste from plant areas that **do not pose** a potential for fire, explosion, off-site run-off, groundwater contamination and can be cleaned up using routine procedures, **will not cause** the Contingency Plan to be activated. In cases where chemicals are spilled outside of buildings in quantities less than the reportable quantity (RQ) and the spill is contained on-site, the Contingency Plan **will not** be activated. The emergency procedures presented in this Crisis Management Plan/Contingency Plan should be used to mitigate minor emergencies that do not require Contingency Plan activation.

4.2 Responses to Emergencies

The Contingency Plan will be activated in case the emergency is a fire, explosion, or release of hazardous waste/material of sufficient magnitude to threaten human health and the environment. This section of the Crisis Management Plan/Contingency Plan is used as a general guide to emergency response actions. The **Response Guides** section of this plan presents emergency action guidelines for incidents that can occur at this plant. The following response actions can serve as generic response methods to be performed during significant emergencies:

> ***Fires and Explosions*** — When a fire or explosion is observed onsite, employees shall notify an authorized supervisor. The supervisor will call the Emergency Coordinator (EC) to assess the situation. If the fire requires more than two fire extinguishers to be used or if an explosion is not contained, then the EC shall activate the Contingency Plan by contacting 911 to notify City of Vernon Fire and Rescue. The EC will coordinate subsequent response activities and any necessary process shut-downs.

Train Derailment — In the event a train derailment impacts the facility, employees should remain in their work areas unless directed to do so by the EC or area supervisor. The EC shall be notified and will implement the contingency plan as necessary in response to the level of plant disruption due to the accident. Potential emergency scenarios include injuries, damage to buildings and other onsite structures, fire, power supply disruption, and the possible release of hazardous materials/wastes if a rail car or debris impacts a tank, bag house, storage area, pipeline, etc.

Acid Spills — If an acid spill is detected, employees shall inform an authorized supervisor, who will then notify the EC of the situation. Initial response actions by employees using appropriate personal protective equipment should be directed at stopping any acid flows from the contributing sources and containing the released material, if possible and safe to do so. The EC shall make emergency notifications as necessary, and direct and coordinate the efforts to contain, collect, neutralize, and dispose of the recovered materials.

Regulated Tank Leak or Failure — In the event of a leak or failure of a tank onsite, employees shall contact an authorized shift supervisor and the EC. Emergency responders using appropriate personal protective equipment should stop the flow of product, and work to contain the spill to minimize the area of impact. The tank should be immediately taken off line, and downstream processes supplied by it, or upstream processes contributing to it should be shut down (or process flows diverted to or from backup or redundant tanks). The EC shall make emergency notifications as necessary, and direct and coordinate the efforts to contain, collect, neutralize, and dispose of the recovered materials.

Hazardous Material/Waste Spills — For hazardous material/waste spills or overflows of hazardous liquids, employees shall notify an authorized supervisor of the emergency. The supervisor will contact the EC and provide him/her with the facts necessary to assess the situation. If a spill or overflow cannot be contained on-site, or if a hazardous liquid overflows emergency containment prior to on-site treatment, the EC will activate the Contingency Plan and direct response efforts to mitigate the incident. The EC shall contact 911, other emergency agencies, and response contractors as necessary to provide emergency response assistance and provide necessary spill notifications to the appropriate government agencies (including the local POTW and sanitation district if sewer or storm drainage systems are or may be impacted). The EC shall also oversee the proper handling and disposal of recovered or treated hazardous wastes, materials, or residues.

Oil Spills — Petroleum products such as vehicle fuel leaks or fuel oil delivery leaks should be controlled in an appropriate manner to prevent discharges to air,

soil, and water. Detailed procedures for handling oil spills at this facility are included in the Spill Prevention Control and Countermeasures (SPCC) Plan maintained separately from this document.

Electrical Failures — Electrical failures will be reported by employees to their supervisor. The supervisor will call maintenance regarding the cause of the power outage. If electrical outage is area wide or plant-wide, the supervisor will call the EC who will determine if outage is significant. The EC or designated employee will call the electric company to determine if the duration of the electrical outage is predicted to be longer than two hours or the cause of the outage cannot be fixed quickly. If the duration of the electrical outage is longer than two hours, the EC will either arrange for long-term emergency back-up electrical power, initiate process shut-down procedures, direct any necessary plant-area evacuations, and call 911 to obtain additional assistance, if required.

Gas Leaks — If a natural gas leak is detected, the employee will call an authorized supervisor. The supervisor will call maintenance. Maintenance will shut off the service to and isolate the area. The area will be tested for explosivity by calibrated portable meters. If the meter indicates high gas levels, higher than methane (propane, if used) Lower Explosive Limit (LEL), the area will be isolated and the maintenance supervisor will call the EC and communicate event details. The EC will activate the Contingency Plan if the gas concentration does not return to normal background levels in ten minutes.

If there is a service outage, the employee will call an authorized supervisor. The supervisor will call maintenance to shut off the service main to plant and call the EC. The EC will work with the gas company to resolve the gas outage. During the event, the EC will direct maintenance personnel to monitor natural gas pipe lines, gas fired equipment, burners, and associated systems. The EC will coordinate plant process shut-downs (where necessary) and subsequent start-up operations after the gas service interruption.

Sewer/Wastewater Overflows — If a sewer or wastewater overflow is observed, the employee will call the shift supervisor. The supervisor will call the EC and give details of the event. If the sewerage or wastewater is going off-site then the Contingency Plan will be activated. The EC will coordinate subsequent activities necessary to mitigate the incident.

Serious Health Injuries — For serious health injuries including heart attacks, strokes, and fatalities, the employee will call the supervisor. The supervisor will call 911 and the EC to communicate the status of the situation. The EC will advise the supervisor or designated person to watch injured person and wait for emergency medical responders. The EC will coordinate the additional response and follow-up activities.

Natural Disasters — For natural disasters, the EC and/or designated employee will monitor weather reports to assess the magnitude of the weather.

Floods — For floods, the plant's lower elevations or flood-prone areas will be monitored, and required diking and stabilization of perimeter walls or drainage channels will be performed; the EC will activate the Contingency Plan if an operation area, utility area, water supply/water treatment area is flooded.

Earthquakes — After the initial shock, the EC on site shall monitor the situation and give the evacuation signal when the immediate threat of aftershocks has passed. After the plant is evacuated, the EC will implement the contingency plan as necessary (and to the extent possible if it is deemed unsafe to re-enter the plant). Utility feeds (gas, water, and electricity) to the facility should be shut off if there is evidence that the lines have been damaged or if this action is requested by local emergency management agencies.

Public Disturbance / Riot — In the event of a civil disturbance outside or near the facility, employees should lock outside entrances to buildings and secure the facility perimeter (close/lock gates, etc.). Remain inside the plant and continue normal work activities. If the situation warrants, the EC may order process shut downs as necessary. Personnel should not leave the facility until permitted to do so by the EC or a plant supervisor.

Internal Labor Disputes / Strikes — The main threat to the facility during a labor dispute is sabotage or vandalism. Plant management and non-striking employees should initiate the orderly shut down of non-critical or threatened plant processes, and these areas should be secured and monitored by plant security. The plant as a whole and any processes still in production should also be protected, and employees should be on the alert for potential problems. The EC shall implement the contingency plan as necessary in response to any emergency situation that might arise.

Other Events — For events including bomb threats, vandalism, and sabotage - the employee will report the incident to the supervisor. The supervisor will notify the EC, who will collect the facts and determine if the Contingency Plan should be activated.

In events involving natural gas, liquefied petroleum gas, or compressed propane gas, the response action should be performed in accordance with the vendor's/supplier's directions and with assistance from the local fire department.

Specific actions to be performed by employees in different plant areas during an emergency that might require Contingency Plan implementation are presented in **Section 7.6**.

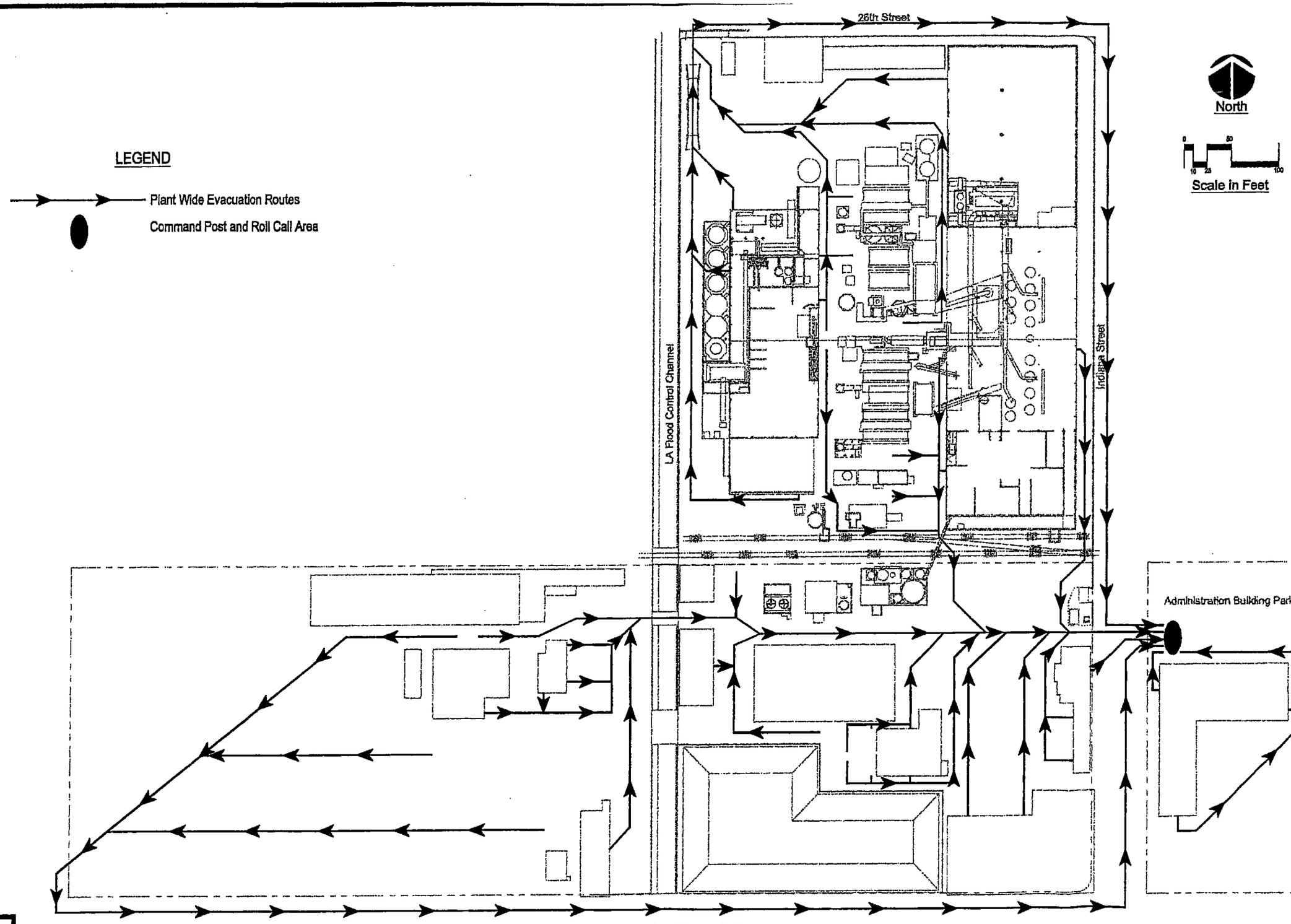
4.3 Evacuation Plan

Any evacuation of the facility will be by the normal emergency evacuation procedures as posted within plant buildings. This plan includes evacuation procedures for all areas of the plant whether or not they are involved in hazardous operations. The plant-wide evacuation route plan for the facility is shown in **Figure 3**. All personnel located south and immediately north of the railroad tracks will evacuate the facility and meet at the Administrative Building parking lot for roll call. All remaining personnel located north of the railroad tracks will evacuate the facility through the 26th Street gate and travel toward the Administrative Building parking lot for roll call. Evacuation maps for specific plant areas are included in **Appendix C** of this plan.

Each of the area evacuation plans denotes both primary and secondary evacuation routes for use in the event that fire or hazardous material/waste blocks the primary routes. Should evacuation of any building be required, all evacuated personnel will move to a designated assembly point away from the location of the emergency.

The signal to start any evacuation shall be given by the shift supervisor and/or the Emergency Coordinator. The signal to begin an evacuation will be transmitted by direct verbal communication or by two-way radios to supervisors in each production area.

If it is unclear whether or not to evacuate a particular area, the area should be evacuated until the Emergency Coordinator makes a determination. Any evacuation of the surrounding properties will be coordinated through the local fire and police departments.



Exide Corporation - Vernon, California

PLANT WIDE EVACUATION ROUTE PLAN

FIGURE 3

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5.0 COPIES AND AMENDMENT OF CONTINGENCY PLAN

A copy of the Contingency Plan and all revisions must be kept at the plant and submitted to all police departments, fire departments, hospitals, and State and local emergency response teams that can be called to provide emergency services.

A copy of the contingency plan and all revisions shall be maintained at the facility in the following locations:

1. Environmental Manager's Office
2. Health & Safety Manager's Office
3. Guardhouse
4. Maintenance Office
5. RMPS Control Room

Stand alone copies of the "Action Package" are maintained in the following locations:

	Administrative Building
Smelting Building	Garage
Refinery	Maintenance Shop
RMPS	Employee Facilities
Wastewater Treatment Building	

A copy of the contingency plan will also be maintained at the office and home of the Emergency Coordinator, all alternates, and Shift Supervisors as listed in **Table 1** and **Table 2**.

This Crisis Management/Contingency Plan is a dynamic document. This plan is required by the regulations to be reviewed and amended, if necessary, whenever:

(a) The facility permit is revised.

(b) Applicable regulations are revised when the facility is an interim status facility.

(c) The plan fails in an emergency.

(d) The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, process upsets, or releases of hazardous waste or hazardous materials, or changes the response necessary in an emergency.

(e) The list of emergency coordinators changes.

(f) The list of emergency equipment changes.

Exide Technologies reserves the right to amend this plan by change, by addition, or by deletion whenever so desired. The plan will be amended, as required, to remain current with any revision of applicable regulations. Once amended, the revised Contingency Plan must be distributed to designated employees and to all police departments, fire departments, hospitals, and State and local emergency response teams that can be called to provide emergency services. The plant manager has responsibility for assuring revisions to the contingency plan are made and distributed.

Each time this plan is significantly amended, new documentation attesting to distribution of the change will be maintained. Copies of the distribution/submittal letters and written responses are maintained with the master copy of this plan at the site.

A record of plan revisions will be kept by updating the plan **Revisions Log** in **Appendix G**, and distribution of significant revisions will be recorded in the **Plan Distribution Record** at **Section 2.1**.

6.0 EMERGENCY COORDINATOR

An up-to-date list of the names, addresses and phone numbers (office and home) of all persons qualified to act as Emergency Coordinators is presented in **Table 2**. The primary EC is designated on a weekly "on call" rotation. Copies of the monthly on-call roster are maintained at CP1, CP2, CP3, and at the guard gate.

At all times there shall be at least one employee, either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time), with the responsibility for coordinating all emergency response measures. The individuals listed on **Table 2** are thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of materials and wastes handled, the location of all records within the facility, and the facility layout. In addition, these persons have the authority to commit the resources needed to carry out the contingency plan.

Table 2: Emergency Coordinators and Alternates

Emergency Coordinators and Alternates			
Name, Title, Address	**Telephone Numbers**		
	Plant	**Cellular**	**Home**
John Hogarth Plant Manager	(323) 262-1101 **EXT. 275**	(323) 395 6130	(626) 345 5008
Nicolas Serieys Interim Environmental Manager	(323) 262-1101 **EXT. 259**	(310) 909-3884	
Rafael Perez Operations Manager	(323) 262-1101 **EXT. 241**	(818) 974-5358	
John Martinez Maintenance Supervisor	(323) 262-1101 **EXT. 226**	(323) 203 8864	(909) 923 4239
Laurel Johnson Health & Safety Manager	(323) 262-1101 **EXT. 276**	(214) 475-1809	
Mamun Hossain Materials Manager	(323) 262-1101 EXT.211	(323) 816 3508	

The facility shift supervisors are listed in **Table 3**. At least one of the employees on this list will be onsite at all times to help coordinate an immediate emergency response at the direction of the EC.

Table 3: Authorized Shift Supervisors (Onsite Coordinators)

Authorized Shift Supervisors (Onsite Coordinators)			
Name, Title	**Telephone Numbers**		
	Plant	**Cellular**	**Home**
Art Vasquez Smelting & Refining Manager	(323) 262-1101 **EXT. 286**	(626) 991 0755	
Lorenzo Carlos Shift Supervisor	(323) 262-1101 **EXT. 286**	(323) 216 9033	
Marshall Pitts Shift Supervisor	(323) 262-1101 **EXT. 286**		

7.0 EMERGENCY PROCEDURES

These response procedures may be used at any time there is an emergency. The Contingency Plan does not have to be activated to use the emergency response guides presented in **Section 7.2**. A list of MSDSs kept on site for chemicals used at the plant are presented in **Appendix D**.

7.1 General Emergency Procedures

The provisions of the plan shall be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous materials which could threaten human health or the environment. The **Response Guides** section at the end of this plan presents specific emergency procedures for particular events.

The employee first discovering an injury, spill or release (including a leaking tank or pipe, overflow incident, or breach of containment systems), fire or explosion, should immediately verbally communicate with nearby co-workers and inform the Shift Supervisor. The employee shall make no attempt to correct an out-of-control situation while alone. Plant personnel have been instructed to alert the Shift Supervisor immediately whenever a potential, imminent, or actual emergency situation is observed. The Shift Supervisor will activate the internal facility alarm or communication system (telephone, two-way radio). The Shift Supervisor will then call the Emergency Coordinator either directly through the plant telephone system or two-way radio, or by calling the guard at the main gate. Employees designated to remain in the area of an emergency should do so only so long as it takes to secure critical operations before evacuating the area. All other employees:

1. Will discontinue operating any equipment or machinery and ensure that the equipment or machinery is in the "STOP" or "OFF" position.
2. Will exit through the nearest available exit in an orderly manner and assemble in the pre-designated roll-call area.
3. Will not return to the scene of the emergency until the all clear sign is given. Employees may only remain in the area if requested to do so by the Shift Supervisor in charge.

Evacuation routes, specific shut-down procedures, roll-call areas, and specific personnel roles are detailed by department in the following sections. Departmental emergency action plans are maintained individually in each department. Employees designated to remain at the scene to secure operations should only do so if there is not an immediate threat to life or health. These individuals have been trained in general first aid and in CPR. The Emergency Coordinator, Shift Supervisor, or their designee must perform the following tasks:

1. Notify the Emergency Coordinator, appropriate authorities as necessary (Fire Dept., Police, Paramedics, etc.), and other facility personnel as appropriate.
2. Ensure that all personnel which have not been designated to remain have been evacuated from the scene of the emergency.
3. Assist any individuals that require help.

Once everyone has been safely evacuated, all personnel will meet at the designated roll-call area to account for everyone from that department. Any casualties will be identified and first aid rendered as soon as possible. Entrance into the affected area will be restricted to those persons equipped with proper protective gear. Only those persons responding to the emergency will be allowed in the area.

The Emergency Response Coordinator is responsible for coordinating all activities necessary to the handling of emergency situations in an efficient and timely manner when the Contingency Plan is activated. **Appendix C** contains the evacuation routes for the plant. Administration forms for spills notification, lost-time incident report, corporate incident report, and executive inspection checklist are provided in **Appendix E**.

The EC is also responsible for ensuring that proper PERSONAL PROTECTIVE EQUIPMENT is worn by employees conducting activities necessary to handle the emergency. The emergency response personnel should be prepared for "worst case conditions."

7.2 Emergency Procedures for the Emergency Coordinator

When there is a minor emergency situation, the emergency procedures in the Crisis Management Plan/Contingency Plan can be used to mitigate the incident without formally implementing this plan. If conditions arise that require the implementation of the Contingency Plan, the Emergency Coordinator or his designee must:

- Activate internal communication systems and notify all plant personnel;
- Notify appropriate State or local response agencies with designated and assigned responsibilities if their assistance is needed;
- Identify the character, source, amount, an areal extent of any released materials;
- Assess potential hazards to human health or the environment that may result from the emergency;
- Report the emergency if it is determined that conditions exist that have or may threaten human health and the environment by providing verbal notification of the situation to the local emergency administering agency, the state Office of Emergency Services, and the National Response

Center (NRC) or the governmental official acting as the federal on-scene coordinator for the region;

- Report releases greater than reportable quantities of any chemical or hazardous material/waste for which release reporting is required to the California Office or Emergency Services and the National Response Center.
- Perform necessary actions to ensure fires, explosions and releases do not occur, recur, or spread;
- Monitor plant for leaks, pressure build-up, gas generation, ruptures in pipes and tanks, or other equipment if the plant stops operation due to fire, explosion, or release;
- Perform necessary post emergency actions to manage waste residues that result from the emergency;
- Perform required post emergency actions to ensure against waste incompatibilities with the released material, and ensure all emergency equipment listed in the plan is cleaned and ready for use before resuming operations;
- Notify the Director at the CA EPA and local authorities that the plant has completed the post emergency actions in affected areas prior to resuming operations;
- Generate a report of the emergency for the plant operating record (if the emergency required implementation of the Contingency Plan);
- Prepare and submit Corporate Incident and Lost Time Incident Reports as applicable
- Submit a report to the CA EPA within 15 days of the incident (if it required implementation of the Contingency Plan; and
- Submit a report to the California Chemical Emergency Planning and Response Commission (CEPRC) within 30 days of the incident (if any chemical was released in excess of its reportable quantity).

If the Emergency Coordinator determines that evacuation of local areas near the plant may be necessary, local emergency authorities will be notified. The EC will be available to assist local officials in the determination of the areas to be evacuated.

Verbal notification of any release or threatened release of a hazardous waste or hazardous material must be made as soon as:

a. A person has knowledge of the release or threatened release of a reportable quantity of a chemical or hazardous material/waste;
b. notification can be provided without impeding immediate control of the release or threatened release; and
c. notification can be provided without impeding immediate emergency medical procedures.

This verbal notification must be provided to each of the following agencies:

- City of Vernon CUPA at (323) 583-8811
- Local Emergency Response Administering Agency at (323) 583-4821
- California State Warning Center at 1-800-852-7550 or 1-916-845-8911; and
- National Response Center at 1-800-424-8802 (or the government official designated as the on-scene coordinator for the area).

The information that must be reported includes:

- The exact location of the release or threatened release,
- Name and telephone number of the reporter (caller),
- Name and address of the plant,
- Name and quantity of the hazardous material/waste(s) involved to the extent known at the time of the call,
- Extent of injuries, and
- Possible hazards to human health and the environment by the hazardous material/waste involved in the release or threatened release.

A form for collecting the above information is included in **Appendix E**.

The National Response Center (NRC) will provide an incident number, the name of the NRC officer that received the information, and the time recorded when the information was received. The Emergency Coordinator must record this information in the operating record to document the NRC notification (or the on-scene coordinator notification).

Similar information should be recorded if it is supplied during notifications to the California Office of Emergency Services and the Local Emergency Response Administering Agency.

If the emergency causes the generation of hazardous residues, these residues must be managed in accordance with applicable waste regulations. The hazardous waste regulations are always in effect whether or not the Contingency Plan is activated.

The owner or operator of the plant must record the time, date, and details of any incident that requires implementing the Contingency Plan. Within 15 days of the incident, the owner or operator must also submit a written report to the California EPA. The report must include the following:

- Name, address, and telephone number of the owner or operator
- Name, address, and telephone number of the plant
- Date, time, and type of incident (spill, fire, explosion, etc.)

- Name and quantity of materials involved
- The extent of injuries, if applicable
- Assessment of actual or potential hazards to human health or the environment, where this is applicable
- Estimated quantity and disposition of recovered material that resulted from the incident

A form for collecting and submitting the above information is included in **Appendix E**.

Written follow-up notification must also be sent to the California Chemical Emergency Planning and Response Commission within 30 days of any non-permitted release of a reportable quantity of a chemical that requires release reporting. The required information must be submitted on the appropriate reporting form. A copy of this form and its instructions are included in **Appendix E**.

If the Contingency Plan was implemented, the plant management will generate an operating record that contains the time, date, and details of the incident. If there was no implementation of the Contingency Plan, there is **no regulatory requirement** for a record to be entered into the operating record. However, the Emergency Coordinator will check with Corporate Environmental Management/Health & Safety to determine if a record of the event should be generated.

Notifications of spills, lost time, and other health and safety incidents must be provided internally to corporate management. **Appendix E** includes a Spill Notification Form, a Lost Time Incident Report, and a Corporate Incident Report that must be completed, as applicable, after an emergency situation has occurred at the plant.

7.3 Post Emergency Procedures

Immediately after an emergency, the Emergency Coordinator shall provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. He/she will determine the optimum cleanup techniques such as neutralization, absorption, mechanical removal, etc. Cleanup efforts will also be monitored by the Emergency Coordinator.

The Emergency Coordinator shall ensure that, in the affected area(s) of the facility:

1. No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed. During an emergency situation, the Emergency Coordinator will also ensure that, reactive materials stored in the vicinity the affected area(s) of the facility will be properly segregated and protected throughout response and

cleanup procedures. See **Figure B-3** in **Appendix B** for the locations of these chemicals. Note that several water reactive chemicals are used at this facility and that special precautions may be necessary to protect them during cleanup activities.

2. All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

Any emergency equipment that has been utilized during an emergency response at the facility will be cleaned and made fit for its intended use before operations resume. This includes, where necessary, wash down of mobile equipment at the wash pit location noted on **Figure 2**. This wash down location has a sump and will capture and route the rinsate to the wastewater treatment facility. Mobile equipment used during an emergency response will be washed down at the new truck wash station after it is constructed. Additional post emergency response activities include, where necessary, recharge or replacement of fire extinguishers, repair of earth moving equipment, cleaning and replacing fire fighting equipment to its proper storage area, restocking emergency medical kits, and the restocking of absorbent material and neutralization chemicals.

The facility shall notify the California Department of Toxic Substances Control and appropriate state and local authorities, that the facility is in compliance with paragraphs (1) and (2) above before operations are resumed. EXIDE TECHNOLOGIES shall note in its operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the facility shall submit a written report on the incident to the CA EPA. The report shall include at a minimum the information listed in the CA EPA reporting form presented in **Appendix E**.

If control of the situation did NOT require the formal implementation of this plan, and NO telephone notifications were made advising of a possible incident, no record of the situation is required to be included in the plant files.

There are other reporting requirements to which the plant is subject, including those of the South Coast Air Quality Management District (SCAQMD).

7.4 Emergency Protocols in Non-Critical Plant Areas

The following positions for specific areas of the plant are designated as non-critical during an emergency (maps referenced as **Figures C-1 to C-14** are located in **Appendix C**):

- Blast Furnace Department (**Figure C-1**): Blast Charge Maker and Utility.
- Reverb Furnace Department (**Figure C-2**): Reverb Charge Maker and Utility.

- Refining Area (**Figure C-3**): Forklift Operators, all Casters, Refining and Casting Helpers, and Utility.
- RMPS Area (**Figure C-4**): Forklift Operators, Filter Press Operator, RMPS Helper, and Utility.
- Baghouse Area (**Figures C-5 and C-6**): Utility and non-departmental personnel.
- Administrative Building (**Figure C-7**): Sales/Purchasing personnel, Secretaries/Accounting Personnel, and Training and Environmental Personnel.
- Garage Area (**Figure C-8**): Junior Mechanic and Utility.
- Maintenance Shop (**Figure C-9**): Electrician, Junior Mechanic, and Utility.
- Employee Facilities Area (**Figure C-10**): all non-critical personnel listed above.

During an emergency, the following procedures will be adhered to by those personnel holding non-critical positions:

1. Discontinue operating any equipment or machinery and ensure that controls are in the STOP or OFF position.

2. Ensure that all flowing slag and/or lead is contained or stopped (Blast and Reverb Furnace Departments, and Refining Area only).

3. Only remain in the area if requested to do so by the Emergency Coordinator or supervisor in charge.

4. Exit through the nearest available exit in an orderly manner. See appropriate figure in Appendix C (**Figures C-1** through **C-14)**.

5. Once you leave the building/area, do not re-enter the building/area until the all-clear sign is given.

Once everyone has been safely evacuated, all personnel will meet at the Administrative Building parking lot for roll call.

7.5 Emergency Protocols in Critical Plant Areas

The following positions for specific areas of the plant are assigned to personnel responsible for critical operations during an emergency (maps referenced as **Figures C-1** to **C-14** are located in **Appendix C**):

- Blast Furnace Department (**Figure C-1**): Shift Supervisor and Blast Furnace Operator.

- Reverb Furnace Department (**Figure C-2**): Shift Supervisor and Reverb Furnace Operator.
- Refining Area (**Figure C-3**): Shift Supervisor, Leadman, Soft Lead and Hard Lead Refiner, and Assistant Refiner.
- RMPS Area (**Figure C-4**): Shift Supervisor, RMPS Operator, and RMPS Assistant Operator.
- Baghouse Area (**Figures C-5 and C-6**): Shift Supervisor, Environmental Operator, and Environmental Operator Leadman (if on day shift).
- Administrative Building (**Figure C-7**): Plant Manager, Regional Controller, Plant Superintendent, Maintenance Superintendent, and Assistant Maintenance Superintendent.
- Employee Facilities Area (**Figure C-10**): Leadman, Respirator Cleaner, and Sweeper Operator.
- Maintenance Shop (**Figure C-13**): Shift Supervisor, Pump Repairman, and Machinist.
- Garage Area (**Figure C-14**): Shift Supervisor, Leadman, and Senior Mechanic.

During an emergency, the following procedures will be adhered to by those personnel responsible for critical operations:

1. Notify the guard to call appropriate authorities, as necessary (Fire Department, Police/Sheriff Department, Paramedics, etc.).

2. Ensure that all non-critical personnel evacuate the building/area.

3. Drain the slag (Blast Furnace Department only) or stop the flow of slag (Reverb Furnace Department only).

4. Turn OFF the following pieces of equipment or machinery for specific areas:

   Blast Furnace Department
   - Root Blower
   - Afterburner
   - Afterburner Blower
   - Skip Hoist (after lowering)
   - fire on Kettles A and B

   Reverb Furnace Department
   - Reverb Burners
   - Reverb Blowers
   - fire on Kettles E, F, and G

   Refining Area
   - all kettles and fires

Axial Fan
agitators (disconnect after turning OFF)
all pumps

RMPS Area

all conveyors and screws
Hammer Mill
Pisquat
Trommel
Filter Press
all pumps
all other moving equipment or machinery

Baghouse Area

affected baghouses (close dampers after turning off)

5. Secure chemicals including sulfur and calcium (Refining Area only).

6. Assist individuals requiring help.

7. Evacuate through the nearest accessible exit.

Once everyone has been safely evacuated, all personnel will meet at the Administrative Building parking lot for roll call.

7.6 Emergency Response Actions for Specific Plant Areas

The following guidelines list the emergency actions that should be performed by facility employees in different plant areas. These response actions are intended to protect human health and the environment from a release, fire, explosion, or other crisis that may occur onsite. These guidelines can be used in every emergency whether or not the Contingency Plan is activated.

7.6.1 Baghouse Area

Utility Workers:

1. Discontinue operating any equipment or machinery and insure that controls are in the STOP or OFF position.

2. Only remain in the area if instructed to do so by the Emergency Coordinator or designee.

3. Evacuate through nearest accessible exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates will meet outside for a head count.

4. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

Environmental Operator, Environmental Operator Leadman, and/or Supervisor:

1. Notify the guard to call the Emergency Coordinator.

2. Ensure that all "non-critical" associate evacuate.

3. Turn OFF affected baghouses and close dampers.

4. Assist associates requiring help.

5. Evacuate through nearest accessible exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates will meet outside for a head count.

6. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

7. Report all actions taken to Emergency Coordinator or designee.

7.6.2 Blast Furnace Department

Blast Charge Maker and/or Utility Operator:

1. Discontinue operating any equipment or machinery and ensure that controls are in the STOP or OFF position.

2. Ensure that all flowing slag and/or lead is contained or stopped.

3. Only remain in the area if instructed to do so by the Emergency Coordinator or designee.

4. Exit through the nearest available exit in an orderly manner. Report to designated staging area.

5. Once you exit the building, do not re-enter the building unless instructed to do so by the Emergency Coordinator or designee.

Blast Furnace Operator and/or Shift Supervisor:

1. Notify the guard to call the Emergency Coordinator.

2. Ensure that all "non-critical" associates evacuate the area.

3. Drain the slag.

4. Turn OFF the:
   - Root Blower
   - Afterburner
   - Afterburner Blower

5. Lower skip hoist and turn it OFF.

6. Turn OFF the fire on Kettles A and B.

7. Assist associates requiring help.

8. Evacuate through nearest available exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates are to meet outside for a head count.

9. Once you exit the building, do not re-enter the building until instructed to do so by the Emergency Coordinator or designee.

10. Report all action taken to Emergency Coordinator or designee.

7.6.3 Reverb Furnace Department

Reverb Charge Maker and/or Utility Operator:

1. Discontinue operating any equipment or machinery and insure that controls are in the STOP or OFF position.

2. Ensure that all flowing slag and/or lead is contained or stopped.

3. Only remain in the area if instructed to do so by the Site Crisis Response Commander or designee.

4. Exit through the nearest available exit in an orderly manner. Report to designated staging area.

5. Once you exit the building, do not re-enter the building until instructed to do so by the Emergency Coordinator or designee.

Reverb Furnace Operator and/or Shift Supervisor:

1. Notify the guard to call Emergency Coordinator.

2. Ensure that all "non-critical" associates evacuate the area.

3. Stop the flow of slag.

4. Turn OFF the:
   ☐ Reverb Burners
   ☐ Reverb Blowers

5. Turn OFF fire on Kettles, E, F, and G.

6. Assist associates requiring help.

7. Evacuate through nearest available exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates will meet outside for a head count.

8. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

9. Report all actions taken to Emergency Coordinator or designee.

7.6.4 Refining Area

Refining and Casting Helpers:

1. Discontinue operating any equipment or machinery and insure that controls are in the STOP or OFF position.

2. Ensure that all flowing slag and/or lead is contained or stopped.

3. Only remain in the area if instructed to do so by the Emergency Coordinator or designee.

4. Exit through the nearest available exit in an orderly manner. Report to designated staging area.

5. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

Leadman, Soft and Hard Lead Refiner, Assistant Refiner and/or Shift Supervisor:

1. Notify the guard to call Emergency Coordinator.

2. Ensure that all "non-critical" associates evacuate.

3. Turn OFF all kettles and fires.

4. Turn OFF axial fan.

5. Turn OFF and disconnect agitators.

6. Turn OFF all pumps.

7. Secure chemicals: sulfur, calcium.

8. Assist associates requiring help.

9. Evacuate through nearest available exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates will meet outside for a head count.

10. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

11. Report all actions taken to Emergency Coordinator or designee.

7.6.5 Raw Material Preparation System (RMPS) Area

Filter Press Operator, RMPS Helper, Utility Operator and/or Forklift Operator:

1. Discontinue operating any equipment or machinery and insure that controls are in the STOP or OFF position.

2. Only remain in the area if instructed to do so by the Emergency Coordinator or designee.

3. Evacuate through nearest available exit in an orderly manner. Report to designated staging area. Once everyone has been safely evacuated, all associates will meet outside at the scrubber for a head count.

4. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

RMPS Operator, Assistant RMPS Operator, and/or Shift Supervisor:

1. Notify the guard to call the Emergency Coordinator

2. Ensure that all "non-critical" associates evacuate.

3. Turn OFF all conveyors and screws.

4. Turn OFF the:
   hammermill, pisquat, trommel

5. Turn OFF the filter press, pumps, and all other moving equipment.

6. Assist associates requiring help.

7. Evacuate through nearest available exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates will meet outside for a head count.

8. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

9. Report all actions taken to Emergency Coordinator or designee.

7.6.7 Garage Area

Junior Mechanic, and/or Utility Worker:

1. Discontinue operating any equipment or machinery and insure that controls are in the STOP or OFF position.

2. Only remain in the area if instructed to do so by the Emergency Coordinator or designee.

3. Evacuate through the nearest available exit in an orderly manner. Report to designated staging area.

4. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

Supervisor and/or Senior Mechanic Lead:

1. Notify the guard to call the Emergency Coordinator.

2. Ensure that all "non-critical" personnel evacuate.

3. Assist associates requiring help.

4. Evacuate through the nearest available exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates will meet for a head count.

5. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

6. Report all actions taken to Emergency Coordinator or designee.

7.6.8 Plant Services Area

Utility Operator:

1. Discontinue operating any equipment or machinery and insure that controls are in the STOP or OFF position.

2. Only remain in the area if instructed to do so by the Emergency Coordinator or designee.

3. Evacuate through the nearest available exit in an orderly manner. Report to the designated staging area

4. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

Plant Services Lead, Respirator Control, and/or Sweeper Operator:

1. Notify the guard to call the Emergency Coordinator.

2. Ensure that all "non-critical" associates evacuate.

3. Assist associates requiring help.

4. Evacuate through the nearest available exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates will meet outside for a head count.

5. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee

6. Report all actions taken to Emergency Coordinator or designee.

7.6.9 Main Office

Sales/Purchasing, Secretaries/Accounting, Training and/or Environmental Personnel:

1. Discontinue operating any equipment or machinery and insure that controls are in the STOP or OFF position.

2. Only remain in the area if instructed to do so by the Emergency Coordinator or designee.

3. Evacuate through the nearest available exit in an orderly manner. Report to designated staging area.

4. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

Plant Manager, Controller, Plant Superintendent, Maintenance Manager:

1. Notify the guard to call the Emergency Coordinator.

2. Ensure that all "non-critical" personnel evacuate.

3. Assist individuals requiring help.

4. Evacuate through the nearest available exit in an orderly manner. Report to the designated staging area. Once everyone has been safely evacuated, all associates will meet for a head count.

5. Once you exit the building, do not re-enter the building until instructed to do so by the Site Crisis Commander or designee.

6. Report all actions taken to Emergency Coordinator or designee.

7.7 Specific Emergency Response Guides

The specific emergency response guides are the essential elements of response to specific emergencies. These guides can be used in every emergency whether or not the Contingency Plan is activated. Guidelines for responding to the following emergency scenarios are presented in the **Response Guides** section at the end of this plan.

- Fires — (Response Guide 1)
- Explosion/Plane Crash/Building Collapse — (Response Guide 2)
- Hazardous Material/Waste Spills — (Response Guides 3A-F, 4A-D)
- Utility Failures: electrical, natural gas, water— (Response Guides 5A-B)
- Wastewater Discharges and Treatment Plant Solids Spills — (Response Guides 5C-D)
- Earthquakes — (Response Guide 6)
- Bomb Threat — (Response Guide 7A)
- Public Disturbance/Riots — (Response Guide 7B)
- First Aid Procedures: injuries, heart attacks, strokes, and fatalities — (Response Guide 8)

8.0 ACTION PACKAGE FOR EMERGENCIES

This Crisis Management Plan/Contingency Plan has been designed to be regulatory document and is presented in a format similar to applicable RCRA regulations. A package of essential information needed during an emergency is presented as an "**Action Package**" located in **Appendix A** of this Contingency Plan. Copies of the Action Package are distributed throughout at the plant for quick reference during an emergency. The contents of the Action Package are as follows:

- General Plant Information
- Emergency Response Coordinators and Alternates, Government Agencies, List of Local Authorities (Support Services), Emergency Notification List, Additional Support Services, Medical Information and Media List, Plant Response Team, List of Authorized Emergency Supervisors, Response Technicians and First Aid Responders, EXIDE TECHNOLOGIES Environmental List, and RQ's for materials managed on-site
- Reporting Requirements for Spills
- Site Location and Topography
- Site and Vicinity Map
- Evacuation Routes
- Crisis Management Guide and Plan Elements
- Administrative Forms: NRC and CA EPA - Telephone Notification Report, State and Local Emergency Response Agency Report, and CA EPA Toxic Substances Control Department Report

The Action Package is a collection of necessary information that can be used effectively by the Emergency Coordinators or Shift Supervisors before, during, and after the implementation of the Contingency Plan. Proper use of the Action Package, however, requires the user to be thoroughly familiar with both the Vernon facility and the contents of the complete Crisis Management Plan/Contingency Plan document.

9.0 PERSONNEL TRAINING

Employees at Vernon facility participate in training program that teaches them to respond effectively to emergencies by providing training that includes a review of emergency procedures, emergency equipment - capabilities and locations, and emergency systems. Formal training is required by Title 22 CCR Section 66264.16, 29 CFR 1910.120, and 40 CFR 264.14 for personnel responsible for handling emergency situations involving hazardous wastes and hazardous materials. The following training topics should be reviewed, if applicable:

- Procedures for using, inspecting, replacing monitoring equipment
- Key parameters for automatic waste feed cut-off systems
- Communications and alarm systems
- Response to fires or explosions
- Response to groundwater contamination incidents
- Shut-down procedures for plant equipment and operations

Plant personnel must complete successfully the training program within six months of hiring with the facility or assignments to the plant or assignment to a new position at the plant, whichever is later. Personnel must not work in unsupervised positions until training is successfully completed. Plant personnel must participate in an annual review of their initial training. In accordance with applicable regulations, the plant management will document employee's name, job title, job description, and commensurate introductory and continuing personnel training given. The training records for current employees must be kept until plant closure. The training records for former employees must be kept for three years.

The Vernon facility personnel training consists of formal training for personnel responsible for handling emergency situations involving hazardous wastes or hazardous materials. The training for emergency response employees will be completed before they are required to perform in an actual emergency.

The training will include:

- The elements of emergency response and the Contingency Plan
- Standard operating procedures associated with handling emergencies
- Personal protective equipment to be worn
- Procedures for handling emergency incidents that do not cause Contingency Plan implementation
- Hazards associated with the various chemicals
- Chemical neutralization procedures
- Isolation of leaks and spills
- Cleanup procedures

- Information about piping, shut off valves and equipment which might be affected during a spill

Formal training will be updated every 12 months, or after an amendment to the Contingency Plan is made.

The plant personnel take part in initial training and an annual refresher training. The plant management maintains records that reflect the job title for each position, amount of initial and continuing training, and records that document training.

Documentation that personnel have received training is a requirement of this plan. Employees sign a training certification which is maintained with other training records. The plant trains personnel commensurate with their job responsibilities and the level of involvement.

Documentation will be maintained with other training records identifying the qualifications and name of the person actually conducting the training. The plant maintains records on current employees until plant closure. Records for former employees are retained three years past the date of employment.

RESPONSE GUIDES

Response Guide 1

Fires

In the event of a fire in the plant, we must initiate evacuation, and all employees are to congregate in the designed areas of the parking lots. When the fire alarm sounds, all employees are to leave their work areas after shutting off their machines and must exit the plant via designated exits. Supervisors are to account for all employees in their department and account for everyone working. Supervisors will perform head counts and report status to the EC.

If a fire develops in any section of the plant, immediate response is to try to contain and extinguish the fire with portable extinguishers. If it cannot be controlled with two extinguishers, the fire alarm is to be sounded and Vernon Fire and Rescue notified. The Fire Department, once on the scene, will lead in the mitigation of the fire with assistance from the EC and other designated personnel. If the threat of offsite transport of toxic smoke, dust, or fumes exists, the EC shall contact local authorities to direct any necessary offsite area evacuations.

Processes that can be approached should be shut down where it is possible and practical to do so. Turn off electrical and natural gas utility services to the impacted areas and, if necessary, to the entire plant.

If a fire is detected in a baghouse, do not open doors for visual inspection as this allows air into the system and “feeds” the fire. The dampers to the affected sections should be closed to suffocate the fire. In most cases this procedure should be sufficient to allow the fire to die out or be greatly reduced before additional fire fighting procedures are initiated.

Cleanup is to be started immediately and all efforts made to prevent water escaping the plant and getting into the sewer or storm drain system.

I. Safety Thinking Comes First

DO NOT enter a potentially dangerous situation alone.

Sound an alarm by alerting management and other workers.

Response Guide 1

Fires
(Continued)

The EC shall assess the emergency and provide all necessary and appropriate notifications to local, state, and federal agencies if: local area evacuations may be advisable, the situation threatens human health or the environment outside the facility, or a release of a reportable quantity of any chemical or hazardous material/waste has occurred or is imminent.

II. Terminate the Contribution Source

Terminating the fire will be the first priority. During the course of the fire, water, chemicals, and solids may be released by fire, or may flow from the fire. Material that is airborne released cannot be controlled, but all persons should be advised of any potential hazard the airborne materials may present to the environment. Material that drains from the area should be contained by diking or redirected to a control or containment area.

III. Confine the Area Affected

Contain and prevent runoff from entering surface drains in the area by diking with soil, sandbags, etc.

IV. Neutralize Harmful Effects

1. Material released because of fire may be neutral, or may be strongly acidic or caustic, and may be quite reactive with water and acids. Avoid direct skin contact, avoid skin contact with vapors, and avoid breathing any vapors. Test solution to determine pH and to identify the material.

2. If the material is acidic, follow the procedures for acid spills. If the material is caustic, follow the procedures for caustic or sodium hydroxide spills.

3. The material may contain lead or other hazardous materials. Flow to surface drainage must be prevented. Diking of outlets from the spill may also be necessary.

Response Guide 1

Fires
(Continued)

Cleanup

1. Pick up material

   - Cleanup the spill material with pumps, vacuum, or other suitable tools. Personnel participating in cleanup operations should wear/utilize the appropriate, approved personal protective equipment (PPE).
   - The remaining wetted spill surfaces should be dried by spreading an absorbent material.
   - Remove absorbent material. If spill was on soil surfaces, also remove the wetted soil.

2. Testing of the affected area

   If the spill or residue resulting from the incident was on soil, the area must be sampled and analyzed for appropriate target compounds. Unless directed otherwise, no sampling or analysis is required for a spill or residue resulting from the incident in an area lined with sealed concrete or within a secondary containment area.

3. Testing of picked up material

   Perform additional testing as necessary to characterize any recovered materials to ensure that proper disposal procedures are followed.

4. Disposition of picked up material

   1. Disposal methods should follow all applicable regulations based upon the components and characteristics of the material. In general, disposal must be in the same manner as would be required for the released substances which are present in the recovered materials.

   2. If appropriate, disposal may be accomplished by rerouting the material back through plant processes or to the Wastewater/Chemical Treatment Plant.

Response Guide 1

Fires
(Continued)

VI. Assess Damage Potential to Humans or the Environment

Provide a brief description of the extent of release and estimated impact on human health and the environment.

VII. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. A report is due to the CA EPA within 15 days of an incident for which the Contingency Plan was implemented. If the fire led to the release of any chemical above its reportable quantity, written follow-up notification must be provided to the California Chemical Emergency Planning and Response Commission.

Response Guide 2

Explosion / Plane Crash / Building Collapse

The plant must be evacuated immediately with employees gathering in the parking lot areas designated for fire evacuation.

The fire alarm is to be sounded by the EC or designated employee to evacuate employees, and 911 will be called to alert emergency authorities. Supervisors are to ensure all personnel are accounted for and make a list of anyone missing. The supervisor will report their personnel head counts. If persons are unaccounted for based on reports, the EC will coordinate necessary activities to look for missing persons. When emergency responders arrive, they are to be advised of anyone missing and the area where they were working as well as any hidden dangers that may be present (acid, elevated storage racks, etc.).

Maintenance is to shut off all electricity prior to the arrival of power utility crews to shut down the primary power grid in the area. Maintenance personnel shall also shut down the main gas supply to the plant.

Notify the emergency response team as soon as possible. Do not re-enter the building unless declared safe by the responders or emergency response team.

Response Guide 3A

Acid Spill

(Sulfuric, Acetic, Nitric, etc.)

******CAUTION — Concentrated Acid Spills Are Very Slippery******

1. Safety Thinking Comes First

   DO NOT enter a potentially dangerous situation alone.

   Sound an alarm by alerting management and other workers.

   Sulfuric and nitric acids each have an RQ of 1,000 lbs, and acetic acid has an RQ of 5000 lbs.

   The EC shall assess the emergency and provide all necessary and appropriate notifications to local, state, and federal agencies if: local area evacuations are required, the situation threatens human health or the environment outside the facility, or a release of a reportable quantity of any chemical or hazardous material/waste has occurred or is imminent.

II. Terminate the Contributing Source

1. Using appropriate personal safety equipment, terminate the contributing source, or redirect the flow to a control or containment area.

2. For this specific type of incident, if the spill is from a transporting device, such as a pipe, close off the supply to the pipe, and attempt to evacuate the pipe by opening a down stream or lower elevation valve where the material can be collected and contained.

   If the spill is from a storage unit and not controlled by valving, an attempt should be made to empty the tank or to decrease the liquid volume in the storage unit by directing the liquid into a containment area.

III. Confine the Area Affected

Control the spilled area by diking with soil, sandbags, absorbent material, etc.

Response Guide 3A

Acid Spill

(Sulfuric, Acetic, Nitric, etc.)
(Continued)

IV. Neutralize Harmful Effects

1. ***The material will be strongly acidic, and quite reactive with water and caustics***. Avoid direct skin contact, avoid skin contact with vapors, and avoid breathing any vapors. Test solution to determine pH.

2. If material cannot immediately be picked up from the spill area, attempts should be made to neutralize the acid. Use extreme caution during any neutralization attempts as the spill may be quite reactive with caustics.

3. For small spills, lime or soda ash may be spread directly over the spilled material.

4. For large spills, dry soda ash or similar approved material should be introduced directly on the spilled material starting at the outer edges.

*****CAUTION — Reactions during neutralization may cause spattering and heat release.*****

5. The material is acidic and may contain lead. Flow to surface drainage must be prevented. Diking of outlets from the spill area may also be necessary.

Cleanup

1. Pick up material

    1. Cleanup the spilled material with pumps, vacuum, or other suitable tools.
    2. The remaining wetted spill surfaces should be dried by spreading an absorbent material.
    3. Remove absorbent material. If spill was on soil surfaces, also remove the wetted soil.

Response Guide 3A

Acid Spill

(Sulfuric, Acetic, Nitric, etc.)
(Continued)

2. Testing of the affected area

   If the spill or residue resulting from the incident was on soil, the area must be sampled and analyzed for appropriate target compounds. Unless directed otherwise, no sampling or analysis is required for a spill or residue resulting from the incident in an area lined with sealed concrete or within a secondary containment area.

3. Testing of picked up material

   Perform additional testing as necessary to characterize any recovered materials to ensure that proper disposal procedures are followed.

4. Disposition of picked up material

   1. Disposal methods should follow all applicable regulations based upon the components and characteristics of the material. In general, disposal must be in the same manner as would be required for the released substances which are present in the recovered materials.

   2. If appropriate, disposal may be accomplished by rerouting the material back through plant processes or to the Wastewater/Chemical Treatment Plant.

VI. Assess Damage Potential to Humans or the Environment

Provide a brief description of the extent of release and estimated impact on human health and the environment.

Response Guide 3A

Acid Spill

(Sulfuric, Acetic, Nitric, etc.)
(Continued)

VII. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. A report is due to the CA EPA within 15 days of an incident for which the Contingency Plan was implemented. If there was a release of any chemical above its reportable quantity, written follow-up notification must be provided to the California Chemical Emergency Planning and Response Commission.

Response Guide 3B

Caustic Solids Spill

(Lime, Soda Ash, etc.)

I. Safety Thinking Comes First

DO NOT enter a potentially dangerous situation alone.

Sound an alarm by alerting management and other workers.

Sodium Hydroxide (Caustic Soda) and Potassium Hydroxide each have an RQ of 1000 lbs.

The EC shall assess the emergency and provide all necessary and appropriate notifications to local, state, and federal agencies if: local area evacuations may be advisable, the situation threatens human health or the environment outside the facility, or a release of a reportable quantity of any chemical or hazardous material/waste has occurred or is imminent.

II. Terminate the Contribution Source

1. Using appropriate personal safety equipment, terminate the contributing source, or redirect the flow to a control or containment area.

2. For this specific type of incident, close supply or emergency valves, turn off feeders or air pressure, eliminate or decrease air flow in the area. If spill is from a bag or small container, turn the bag or container to limit further release.

III. Confine the Area Affected

1. Lime and soda ash is generally a powder-like solid that is easily conveyed by moving air. As soon as possible, eliminate all air drafts that will spread the material beyond the spill site. An alternative may be to gently cover the spill material with a tarpaulin. (Such tarpaulins must be approved for chemical use to avoid reaction with waterproofing compounds or similar organic material.)

Response Guide 3B

Caustic Solids Spill

(Lime, Soda Ash, etc.)
(Continued)

2. Caustic soda/sodium hydroxide and potassium hydroxide as dry chemical are generally supplied in the form of flakes or small pellets. These compounds are very hygroscopic (water absorbing) and become very slippery to the touch and form tacky clumps when exposed to high atmospheric humidity or light mists. In dry flake form, these materials may also be easily conveyed by moving air, as described above.

3. If absolutely necessary to confine these materials, water may be gently added to wet the spill area.

4. Flow to surface drainage must be prevented. Diking of outlets from the spill area may also be necessary.

IV. Neutralize Harmful Effects

1. Remove all non-essential persons from the area to limit exposure.

2. Provide respirators and protective clothing for persons involved in the cleanup and for persons that must remain in the area.

3. The material will probably be **strongly caustic**, and will be **highly reactive** to eyes, nose, throat and lungs; **avoid contact** to sensitive tissue areas and skin -- especially sodium and potassium hydroxide pellets. (Dry lime and soda ash will probably not be highly reactive to skin unless there is prolonged exposure or the presence of water; however it is still best to avoid direct skin contact as much as possible.)

4. The material will probably be strongly caustic, and probably quite reactive with water and acids. Test material to determine pH.

Response Guide 3B

Caustic Solids Spill

(Lime, Soda Ash, etc.)
(Continued)

Cleanup

1. Pick up material

   Cleanup the spilled material with a shovel, vacuum (use plant vacuum), floor scrubber, or other suitable tool. Scrape the area clean to remove all spilled material.

2. Testing of the affected area

   In general, no testing will be required for this type of spill if it is confined within a building or other plant structure, unless the area is over exposed soil, and the area has been subjected to substantial quantities of free liquid during the time the spilled material was deposited on the area.

   NOTE: In general, no testing will be required for lime and soda ash spills since these materials are naturally occurring, and a small residue left from cleanup would not be deleterious to the environment.

3. Testing of picked up material

   Perform additional testing as necessary to characterize any recovered materials to ensure that proper disposal procedures are followed.

4. Disposition of picked up material

   1. Disposal methods should follow all applicable regulations based upon the components and characteristics of the material. In general, disposal must be in the same manner as would be required for the released substances which are present in the recovered materials.

   2. If appropriate, disposal may be accomplished by rerouting the material back through plant processes or to the Wastewater/Chemical Treatment Plant.

Response Guide 3B

Caustic Solids Spill

(Lime, Soda Ash, etc.)
(Continued)

VI. Assess Damage Potential to Humans or the Environment

Provide a brief description of the extent of release and estimated impact on human health and the environment.

VII. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. A report is due to the CA EPA within 15 days of an incident for which the Contingency Plan was implemented. If there was a release of any chemical above its reportable quantity, written follow-up notification must be provided to the California Chemical Emergency Planning and Response Commission.

Response Guide 3C

Caustic Liquids Spill

(Solutions of Caustic Soda, Potassium Hydroxide, etc.)

******CAUTION — Liquid Caustic Spills Are Very Slippery, and Concentrated Caustic is Very Heavy******

1. Safety Thinking Comes First

   DO NOT enter a potentially dangerous situation alone.

   Sound an alarm by alerting management and other workers.

   Caustic Soda (Sodium Hydroxide) and Potassium Hydroxide each have an RQ of 1,000 lbs.

   The EC shall assess the emergency and provide all necessary and appropriate notifications to local, state, and federal agencies if: local area evacuations may be advisable, the situation threatens human health or the environment outside the facility, or a release of a reportable quantity of any chemical or hazardous material/waste has occurred or is imminent.

II. Terminate the Contributing Source

1. Using appropriate personal safety equipment, terminate the contributing source, or redirect the flow to a control or containment area.

2. For this specific type of incident, if the spill is from a transporting device, such as a pipe, close off the supply to the pipe, and attempt to evacuate the pipe by opening a down stream or lower elevation valve where the material can be controlled and contained.

   If the spill is from a storage unit and not controlled by valving, an attempt should be made to empty the tank or to decrease the liquid volume in the storage unit by directing the liquid into a containment area.

III. Confine the Area Affected

Control the spilled area by diking with soil, sandbags, absorbent materials, etc.

Response Guide 3C

Caustic Liquids Spill

(Solutions of Caustic Soda, Potassium Hydroxide, etc.)
(Continued)

IV. Neutralize Harmful Effects

1. The material will be strongly caustic (basic), and quite reactive with water and acids. Avoid direct skin contact, avoid skin contact with vapors, and avoid breathing any vapors. Test solution to determine pH.

2. If material cannot immediately be picked up from the spill area, attempts should be made to neutralize the caustic solution. Use extreme caution during any neutralization attempts as the spill may be quite reactive with water and acid.

    1. For small spills, absorbents may be spread directly over the spilled material or water may be added to dilute the spill.

    2. For large spills, ***DILUTED*** acid may be introduced directly into the spilled material using a long pipe as a "lance" placed directly into the spill. (The dilute acid may be pumped through the lance directly from a transport truck.)

*****CAUTION -- Reactions during neutralization may cause spattering and heat release.*****

3. The material is caustic and may contain lead. Flow to surface drainage must be prevented. Diking of outlets from the spill area may also be necessary.

4. Cleanup

    1. Pick up material

    2. Cleanup the spilled material with pumps, vacuum, or other suitable tools.

    3. The remaining wetted spill surfaces should be dried by spreading an absorbent material.

    4. Remove absorbent material. If spill was on soil surfaces, also remove the wetted soil.

5. Testing of the affected area

   If the spill or residue resulting from the incident was on soil, the area must be sampled and analyzed for appropriate target compounds and pH. Unless directed otherwise, no sampling or analysis is required for a spill or residue resulting from the incident in an area lined with sealed concrete or within a secondary containment area.

6. Testing of picked up material

   Perform additional testing as necessary to characterize any recovered materials to ensure that proper disposal procedures are followed.

7. Disposition of picked up material

   1. Disposal methods should follow all applicable regulations based upon the components and characteristics of the material. In general, disposal must be in the same manner as would be required for the released substances which are present in the recovered materials.

   2. If appropriate, disposal may be accomplished by rerouting the material back through plant processes or to the Wastewater/Chemical Treatment Plant.

VI. Assess Damage Potential to Humans or the Environment

Provide a brief description of the extent of release and estimated impact on human health and the environment.

VII. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. A report is due to the CA EPA within 15 days of an incident for which the Contingency Plan was implemented. If there was a release of any chemical above its reportable quantity, written follow-up notification must be provided to the California Chemical Emergency Planning and Response Commission.

B. Shut off any potential ignition sources in the vicinity of the spill, and downwind where vapors may be transported to prevent an oil fire or explosion.

C. If the spill cannot be rapidly contained, efforts should focus on preventing the oil from coming into contact with or entering areas containing hazardous or incompatible materials, flowing into storm drains, or leaving facility property.

D. If onsite oil spill response capabilities have been exceeded, the EC shall contact offsite response contractors to assist in cleanup and recovery activities. The EC and other designated facility personnel shall act to help coordinate continued response activities and provide additional assistance as needed.

IV. Cleanup

1. Pick up material

    1. Cleanup the spilled material with pumps, skimmers, or other suitable tools.

    2. The remaining wetted spill surfaces should be dried by spreading an absorbent material.

2. Testing of the affected areas

    If the spill or residue resulting from the incident was on soil, the area must be sampled and analyzed for appropriate target compounds. Unless directed otherwise, no sampling or analysis is required for a spill or residue resulting from the incident in an area lined with sealed concrete or within a secondary containment area.

3. Disposition of recovered materials

    Consult SPCC plan for proper disposal of recovered oil, impacted soil, and oily wastes.

V. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. Consult SPCC Plan and provide any follow-up notifications and perform oil spill emergency response reviews and SPCC Plan updates as required.

Response Guide 3E

General Liquids Spill
(Wastewater, Sanitary Sewer, etc.)

I. Safety Thinking Comes First

DO NOT enter a potentially dangerous situation alone.

The EC or designated employee will sound alarm to alert management and other workers.

The EC shall assess the emergency and provide all necessary and appropriate notifications to local, state, and federal agencies if: local area evacuations may be advisable, the situation threatens human health or the environment outside the facility, or a release of a reportable quantity of any chemical or hazardous material/waste has occurred or is imminent.

II. Terminate the Contribution Source

1. Using appropriate personal safety equipment, terminate the contributing source, or redirect the flow to a control or containment area.

2. For this specific type of incident, if spill is from a transporting device, such as a pipe, close off the supply to the pipe, and attempt to evacuate the pipe by pumping, or by opening a downstream, or lower elevation, valve to redirect the material into a containment area.

   If the spill is from a storage unit, and not controlled by valving, an attempt should be made to empty the tank or to decrease the liquid volume by draining the material into a containment area.

III. Confine the Area Affected

Control the spill area by diking with soil, sandbags, lime, etc.

IV. Neutralize Harmful Effects

1. The material may be neutral, or may be strongly acidic or caustic, and may be quite reactive with water and acids. Avoid direct skin contact, avoid skin contact with vapors, and avoid breathing vapors. Test solution to determine pH and to identify the material.

2. If the material is strongly acidic, follow the procedures for acid spills. If the material is strongly caustic, follow the procedures for caustic spills.

3. The material may contain lead or other hazardous materials. Flow to surface drainage must be prevented. Diking of outlets from the spill area may also be necessary.

V. Cleanup

1. Pick up material

    1. Cleanup the spilled material with pumps, vacuum, or other suitable tools.
    2. The remaining wetted spill surfaces should be dried by spreading an absorbent material.

2. Testing of the affected area

    If the spill or residue resulting from the incident was on soil, the area must be sampled and analyzed for appropriate target compounds. Unless directed otherwise, no sampling or analysis is required for a spill or residue resulting from the incident in an area lined with sealed concrete or within a secondary containment area.

3. Testing of picked up material

    Perform additional testing as necessary to characterize any recovered materials to ensure that proper disposal procedures are followed.

4. Disposition of picked up material

    1. Disposal methods should follow all applicable regulations based upon the components and characteristics of the material. In general, disposal must be in the same manner as would be required for the released substances which are present in the recovered materials.

2. If appropriate, disposal may be accomplished by rerouting the material back through plant processes or to the Wastewater/Chemical Treatment Plant.

VI. Assess Damage Potential to Humans or the Environment

Provide a brief description of the extent of release and estimated impact on human health and the environment.

VII. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. A report is due to the CA EPA within 15 days of an incident for which the Contingency Plan was implemented. If there was a release of any chemical above its reportable quantity, written follow-up notification must be provided to the California Chemical Emergency Planning and Response Commission.

Response Guide 3F

Regulated Tank Leak / Failure

1. Safety Thinking Comes First

DO NOT enter a potentially dangerous situation alone.

Sound an alarm by alerting management and other workers.

The EC shall assess the emergency and provide all necessary and appropriate notifications to local, state, and federal agencies if: local area evacuations may be advisable, the situation threatens human health or the environment outside the facility, or a release of a reportable quantity of any chemical or hazardous material/waste has occurred or is imminent.

II. Terminate the Contributing Source

1. Using appropriate personal safety equipment, terminate the contributing source, or redirect the flow to a control or containment area.

2. If the spill is from a transporting device, such as a pipe, close off the supply to the pipe, and attempt to evacuate the pipe by opening a down stream or lower elevation valve where the material can be controlled and contained.

3. If the spill is from a ruptured seam or otherwise failed tank and not controllable by valving, an attempt should be made to empty the tank or to decrease the liquid volume in the storage unit by directing the liquid into a containment area.

4. The affected tank(s) should be taken offline and pumps and valves shut off where possible to minimize the potential spill volume.

III. Confine the Area Affected

Control the spilled area by diking with soil, sandbags, absorbent materials, etc.

Response Guide 3F

Regulated Tank Leak / Failure
(Continued)

IV. Neutralize Harmful Effects

1. The material may be strongly acidic or caustic, and quite reactive with water, strong bases, or acids. Avoid direct skin contact, avoid skin contact with vapors, and avoid breathing any vapors. Test the spilled liquid to determine pH. The RQ for a corrosive material spill (pH less than 2 or greater than 12.5) is 100 lbs.

2. If the material is strongly acidic, follow the procedures for acid spills. If the material is strongly caustic, follow the procedures for caustic spills.

3. The material may contain lead, arsenic, or other toxic metals. Flow to surface drainage must be prevented. Diking of outlets from the spill area may also be necessary. Test the material for metal content. The spill must be reported if the metal concentration is greater than the toxicity characteristic level for that metal (e.g., 5 mg/L for lead or arsenic) and the amount material released is greater than the RQ for that metal (e.g., 10 lb for lead and 1 lb for arsenic).

V. Cleanup

1. Pick up material

    1. Cleanup the spilled material with pumps, vacuum, or other suitable tools.
    2. The remaining wetted spill surfaces should be dried by spreading an absorbent material.
    3. Remove absorbent material. If spill was on soil surfaces, also remove the wetted soil.

2. Testing of the affected area

   If the spill or residue resulting from the incident was on soil, the area must be sampled and analyzed for appropriate target compounds. Unless directed otherwise, no sampling or analysis is required for a spill or residue resulting from the incident in an area lined with sealed concrete or within a secondary containment area.

C. Testing of picked up material

   Perform additional testing as necessary to characterize any recovered materials to ensure that proper disposal procedures are followed.

D. Disposition of picked up material

   1. Disposal methods should follow all applicable regulations based upon the components and characteristics of the material. In general, disposal must be in the same manner as would be required for the released substances which are present in the recovered materials.

2. If appropriate, disposal may be accomplished by rerouting the material back through plant processes or to the Wastewater/Chemical Treatment Plant.

VI. Assess Damage Potential to Humans or the Environment

Provide a brief description of the extent of release and estimated impact on human health and the environment.

VII. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. A report is due to the CA EPA within 15 days of an incident for which the Contingency Plan was implemented. If there was a release of any chemical above its reportable quantity, written follow-up notification must be provided to the California Chemical Emergency Planning and Response Commission.

Response Guide 4A

Lead Paste / Desulfurized Mud Spill

Lead paste is primarily composed of lead sulfate, lead oxide, and sulfuric acid. The material is acidic and as such will be reactive with water and caustics. Desulfurized mud is generated by the neutralization of lead-acid battery paste with sodium carbonate (soda ash) and also contains recovered lead smelting furnace flue dust. Its primary component is lead carbonate.

Avoid skin contact with these materials and avoid breathing vapors or dust from dried paste or mud. The RQ for a spill of lead paste and/or desulfurized mud is 10 lbs.

Emergeny activities should follow the protocols outlined in the response guide for regulated tank leak / failure. Properly test all collected materials (recovered liquids, sorbents, and impacted soils) for both lead and pH, perform any necessary reporting required, and dispose of the wastes appropriately.

Response Guide 4B

Flue Dust Spill

I. Safety Thinking Comes First

DO NOT enter a potentially dangerous situation alone.

Sound an alarm by alerting management and other workers.

Flue dust from the secondary lead smelting furnaces which is collected in the bag house contains lead and is a RCRA listed hazardous waste (K069). The RQ for this dust is 10 lbs.

The EC shall assess the emergency and provide all necessary and appropriate notifications to local, state, and federal agencies if: local area evacuations may be advisable, the situation threatens human health or the environment outside the facility, or a release of a reportable quantity of any chemical or hazardous material/waste has occurred or is imminent.

II. Terminate the Contribution Source

1. Using appropriate personal safety equipment, terminate the contributing source, or redirect the flow to a control or containment area.

2. For this specific type of incident, close supply or emergency valves, turn off feeders or air pressure, eliminate or decrease air flow in the area.

III. Confine the Area Affected

1. Lead smelting furnace flue dust is a powder-like solid that is easily conveyed by moving air. As possible, eliminate all air drafts that will spread the material beyond the spill site. An alternative may be to gently cover the spill material with a tarpaulin. (Such tarpaulins must be approved for chemical use to avoid reaction with waterproofing compounds or similar organic material.)

2. If absolutely necessary to confine these materials, water may be gently added to wet the spill area.

3. Flow to surface drainage must be prevented. Diking of outlets from the spill area may also be necessary.

Response Guide 4B

Flue Dust Spill
(Continued)

IV. Neutralize Harmful Effects

1. Remove all non-essential persons from the area to limit exposure.

2. Provide respirators and protective clothing for persons involved in the cleanup and for persons that must remain in the area.

3. The material contains lead dust; **avoid inhalation and contact** to sensitive tissue areas and skin.

V. Cleanup

1. Pick up material

   Cleanup the spilled material with a shovel, vacuum (use plant vacuum), floor scrubber, or other suitable tool. Scrape the area clean to remove all spilled material.

2. Testing of the affected area

   In general, no testing will be required for this type of spill if it is confined within a building or other plant structure, unless the area is over exposed soil, and the area has been subjected to substantial quantities of free liquid during the time the spilled material was deposited on the area.

3. Testing of picked up material

   Test recovered materials (recovered liquids, absorbents, dust, impacted soils) for lead and other hazardous metals content.

4. Disposition of picked up material

   1. Dispose of recovered dust in the same manner as required for original material.

   2. Dispose of the other recovered materials appropriately, depending on the measured content of lead and/or other metals.

VI. Assess Damage Potential to Humans or the Environment

Provide a brief description of the extent of release and estimated impact on human health and the environment.

VII. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. A report is due to the CA EPA within 15 days of an incident for which the Contingency Plan was implemented. If there was a release of any chemical above its reportable quantity, written follow-up notification must be provided to the California Chemical Emergency Planning and Response Commission.

Response Guide 4C

Lead-Acid Battery Electrolyte Spill

*****CAUTION -- Battery Electrolyte is acidic, slippery, and reactive with water and caustics.*****

Waste lead-acid battery electrolyte is a solution of sulfuric acid which is likely to contain dissolved lead. Avoid direct skin contact, avoid skin contact with vapors, and avoid breathing any vapors.

If the lead concentration in the electrolyte is greater than 5 mg/L, or if its pH is less than 2 the material is a hazardous waste. The RQ for lead toxicity characteristic waste is 10 lbs (approx. ½ gallon electrolyte), for corrosive waste the RQ is 100 lbs (or about 6½ gallons), and the RQ for sulfuric acid is 1,000 lbs (approx. 65 gallons).

Emergency activities should follow the protocols outlined in the response guide for acid spills. Properly test all collected materials (recovered liquids, sorbents, and impacted soils) for both lead and pH, perform any necessary reporting required, and dispose of the wastes appropriately.

Response Guide 4D

Waste Lead-Acid Battery Spill

Lead-acid batteries contain electrolyte and lead paste that can be released if the battery cases are damaged, cracked, or otherwise ruptured (e.g., if a pallet of batteries is dropped). ***The electrolyte and paste are likely to be acidic (sulfuric acid), and thus slippery and reactive with water and caustics.*** The electrolyte will contain dissolved lead, and the paste contains lead primarily in the form of lead sulfate. Avoid skin contact with battery contents, avoid skin contact with vapors, and avoid breathing vapors.

The RQ for lead paste is 10 lbs. The RQ for the electrolyte is 10 lbs if the lead content is 5 mg/L or greater, 100 lbs if the pH is 2 or lower, and 1,000 lbs for sulfuric acid.

Recovered battery solids can be fed to the RMPS unit. ***Emergency response actions should follow the protocols outlined in the response guides for lead-acid battery electrolyte, acid, and lead paste/desulfurized mud spills.*** Properly test all collected materials (recovered liquids, sorbents, and impacted soils) for both lead and pH, perform any necessary reporting required, and dispose of the wastes appropriately.

Response Guide 5A

Power Failures

ELECTRIC UTILITY: City of Vernon Electricity
4305 Santa Fe
Vernon, CA 90058

Industrial Outage Notification: Normal Hours: (323) 583-8811
After Hours: (323) 585-5070

Electrical failures will be reported by facility personnel to the shift supervisor. The supervisor will call maintenance regarding the cause of the power outage. If electrical outage is area-wide or plant-wide, the supervisor will call the EC who will determine if outage is significant. The EC or designated employee will call the electric company to determine if the duration of the electrical outage is predicted to be longer than two hours or the cause of the outage cannot be fixed quickly. If the duration of the electrical outage is longer than two hours, the EC will either set-up emergency back-up electrical power or evacuate the area or the plant, if necessary, and call 911 to provide additional assistance, if required

The department most vulnerable to a power failure is the smelting and refining area, since this would mean a loss of power to the ventilation system. In this situation, it is possible for heat and fumes to build up inside process buildings. The Battery Energy Storage System (BESS) located between the Smelter Building and the scale house provides uninterruptable power to the critical ventilation system during momentary and/or sustained power interruptions at the plant. The BESS can provide backup power to the critical loads for one hour, allowing the plant to safely shut down if main power cannot be restored.

An orderly shutdown of the furnaces should take place according to the procedure outlined below:

1. Verify that the condition requires initiation of shutdown.
2. Notify affected parties of the potential for release of emissions.
3. Shut down burners.
4. Shut down furnace charging process.
5. Safely close smelter/refining doors to decrease external emissions.
6. Notify Emergency Coordinator.
7. Notify facility maintenance of conditions requiring repair.
8. Follow SOP for notification of SCAQMD (1-800-572-6306),
9. Shift Supervisor complete the facility breakdown report and forward to Environmental Manager.

Response Guide 5B

Utilities

NATURAL GAS: Southern California Gas Company
UTILITY: 1919 S. State College Blvd.
Anaheim, CA 92806

Industrial Outage Notification: (323) 260-7000 or
1-800-427-2000

If a natural gas leak is detected, employees will notify an authorized supervisor. The supervisor will call maintenance. Maintenance will shut off the service to and isolate the area. The area will be tested for explosivity by calibrated portable meters. If the meter indicates high gas levels, higher than the Methane (or Propane, if used) Lower Explosive Limit (LEL), the area will be closed off to personnel and the maintenance supervisor will call the EC and communicate event details. The EC will activate the Contingency Plan if the gas concentration does not return to normal background levels in ten minutes.

If there is a service outage, personnel shall contact an authorized supervisor. The supervisor will call maintenance to shut off the service main to plant and call the EC. The EC will work with the gas company to resolve the gas outage. During the event, the EC will direct maintenance personnel to monitor natural gas pipe lines, gas fired equipment, burners, and associated systems. The EC will coordinate start-up operations after the gas service interruption.

WATER UTILITY: California Water Service
3316 W. Beverly Blvd.
Montebello, CA 90640-1537

Industrial Outage Notification: (323) 722-8601

If there is a service outage, personnel shall contact an authorized supervisor. The supervisor will contact maintenance and the EC if the outage threatens to disrupt critical processes. If necessary the EC shall direct the orderly shut-down of plant systems and work with maintenance personnel and/or water utility representatives to resolve the outage and minimize the effects on the facility. The EC shall coordinate start-up operations as necessary after water service is restored to the affected plant areas.

Response Guide 5C

Wastewater Discharges

City of Vernon: 24 Hours: (323) 583-8811
(Local Sewer System Authority)

Los Angeles County Sanitation District:
Supervising Industrial Waste Inspector: Duty Hours Only: (562) 699-7411
Long Beach Pump Plant: 24 Hours: (562) 437-6520

Sanitary Sewer Treatment Plant: Los Angeles County Sanitation District
Joint Water Pollution Control Plant
24501 South Figueroa Street
Carson, CA 90745

Phone: (323) 775-2351

Wastewater Discharged to Sanitary Sewer

If the pH of the discharge stream from the Wastewater/Chemical Treatment System exceeds the limits established by the local Sanitary Sewer Agency (e.g., if all installed controls fail), **but** the discharge stream remains contained in the sanitary sewer system, the Wastewater/Chemical Treatment System must be shut down immediately following the standard operating procedures. Contact the Emergency Coordinator.

The Emergency Coordinator must immediately notify the Sanitary Sewer Agency of the out-of-limit pH, report the approximate quantity of discharge, and take other appropriate action as required.

Wastewater Discharge Not in Sanitary Sewer

If there is an unauthorized discharge from the Wastewater/Chemical Treatment System, or from the plant, that is **NOT** contained in the sanitary sewer system, action must be taken immediately to shut down the Wastewater/Chemical Treatment System or to curtail and confine the discharge, follow standard operating procedures, and contact the Emergency Coordinator.

Response Guide 5C

Wastewater Discharges

The Emergency Coordinator must immediately notify the appropriate agencies responsible for surface drainage or surface discharges, report the approximate quantity of discharge, the name of the drainage basin affected by the discharge, the pH, and take other appropriate action as required.

Response Guide 5D

Wastewater/Chemical Treatment Plant Solids

I. Safety Thinking Comes First

DO NOT enter a potentially dangerous situation alone.

Alert management and other workers.

II. Terminate the Contributing Source

1. Using appropriate personal safety equipment, terminate the contributing source, or redirect the flow to control or contain the area.

2. For this specific type of incident, close supply or valves, turn off pumps, decrease or release air pressure, lower liquid levels, use sandbags or add control dikes as required.

III. Confine the Area Affected

1. The solids have a limited amount of free liquid and will not readily flow without additional material being added.

2. Control area by sandbags or diking with soil, concrete blocks, boards, etc.

IV. Cleanup

A. Pick up material

Cleanup the spilled material with a shovel, or other suitable tool. Scrape the area clean to remove all spilled material.

B. Testing of the affected area

In general, no testing will be required for this type of spill unless the area has been subjected to substantial quantities of free liquid during the time the spilled material was deposited on the area.

C. Testing of picked up material

Perform testing as necessary to characterize any recovered materials to ensure that proper disposal procedures are followed.

D. Disposition of picked up material

1. Disposal methods should follow all applicable regulations based upon the components and characteristics of the material. In general, disposal must be in the same manner as would be required for the released substances which are present in the recovered materials.

2. If appropriate, disposal may be accomplished by rerouting the material back through plant processes or to the Wastewater/Chemical Treatment Plant.

VI. Assess Damage Potential to Humans or the Environment

Provide a brief description of the extent of release and estimated impact on human health and the environment.

VII. Incident Logs and Final Reports

Document the incident by preparing an operating record which describes the emergency situation and the response actions taken. A report is due to the CA EPA within 15 days of an incident for which the Contingency Plan was implemented. If there was a release of any chemical above its reportable quantity, written follow-up notification must be provided to the California Chemical Emergency Planning and Response Commission.

Response Guide 6

Earthquake Disaster

In the event of an earthquake, employees in the plant shall stop operating equipment and seek immediate shelter in a reinforced area of the plant away from molten lead and chemical storage areas, under a desk or table, or by bracing themselves within door frames or against an inside wall; away from windows, skylights, and top heavy or overhead equipment/machinery/wires.

Once the initial shock stops, employees should remain stationary for several minutes unless absolutely necessary (in case of aftershocks), until an order to evacuate has been issued by the shift supervisor. Follow emergency evacuation procedures being alert for fires, blocked exits, chemical or hazardous material/waste spills, falling objects, and live electrical wires.

After the plant is evacuated, the EC will implement the contingency plan as necessary (and to the extent possible if it is deemed unsafe to re-enter the plant). Critical operations personnel should commence orderly shutdown of affected equipment and processes. Utility feeds (gas, water, and electricity) to the facility should be shut off if there is evidence that the lines have been damaged or if this action is requested by local emergency management agencies.

Response Guide 7A

Bomb Threat

In the event of a bomb threat, the person receiving the call should obtain and record as much information as possible, including:

- Time of day
- Voice characteristics-male/female, accent, sober, ranting, etc.
- Estimated age of caller
- Background noises
- What time bomb to explode
- What type of bomb
- Where it is located
- Why this plant
- Keep on phone as long as possible to get information

Alert plant manager or human resources manager or EC immediately; if possible, get someone to notify while you are on the phone. **DO NOT USE TWO-WAY RADIO SYSTEM!**

The plant manager or human resources manager or EC will notify local authorities by calling the emergency response line (911) and report the threat. If considered serious, the plant must be evacuated as per a fire emergency. All employees are to assemble in the parking lots at designated location. If considered frivolous by the local authorities, they will determine the plan of action and whether or not to implement plant evacuation.

After the plant has been determined safe, all employees will return to work.

A report of the scenario will be written and all pertinent information maintained in case of further problems.

In the case of a call at night, the same operations will be observed.

IF THE THREAT IS IMMEDIATE, THE PLANT MUST BE EVACUATED!

Response Guide 7B

Public Disturbance / Riot

Public disturbances, disorder, or civil strife is a breach of the peace or public order which could result in a riot or mob action directed against the Vernon facility.

In the event of a public disturbance outside or near the facility property:

1. Lock all exterior entrances to facility buildings.
2. Lock or otherwise secure the perimeter (gates, etc.).
3. EXIDE TECHNOLOGIES personnel are to be kept within the facility.
4. Contact the EC to assess the situation and determine if any or all processes should be shut down.

All EXIDE TECHNOLOGIES employees should:

1. Remain in normal work areas.
2. Continue to perform regular work duties, or commence orderly process shut downs if instructed to do so by an area supervisor or the EC.
3. Leave buildings or facility property only when permitted by a Supervisor.

Response Guide 8

First Aid Procedures

The procedures to be followed whether a minor or major injury, under each circumstance, are presented below. The guidelines for blood borne pathogens will also be followed. The Emergency Coordinator is responsible for ensuring these procedures are followed.

Minor Injuries - Not Needing a Doctor's Care

1. Bring the injured employee to the first aid room.
2. Treat the injury.
3. Fill out the treatment log.
4. Return the worker to duty.

Doctor's Care Required — No Bone Involvement, 2nd or 3rd Degree Burns

1. Give first aid.
2. Arrange for transportation to Spectrum Industrial Medical Clinic.
   Do not allow an injured person to drive himself to the clinic.
3. Fill out a treatment authorization slip — give it to the injured worker.
4. Call the hospital — tell them an individual is on the way and describe the injuries.
5. Send the injured worker to Spectrum Clinic by the arranged vehicle.
6. Fill out the treatment log.
7. Call the EC and report status of the situation.
8. Fill out an accident report.
9. The Health and Safety Technician or designated person by EC will follow-up with the clinic about the injured worker and report information to EC.

Doctor's Care Required — Bone Involvement, and 2nd or 3rd Degree Burns

1. Call the paramedics (911) if the worker cannot move or be moved.
2. Give first aid.
3. Arrange for transportation via the paramedics to the proper emergency treatment plant and have the safety representative meet EMS at the gate.
   Do not allow an injured person to drive himself for treatment.
4. Fill out a treatment authorization slip — give it to the injured worker.
5. Fill out the treatment log.
6. Call the EC and report status of the situation.
7. Fill out an accident report.

Response Guide 8

First Aid Procedures

8. The Health and Safety Technical or designated person by EC will follow-up with the hospital about the injured worker and report information to EC.

Major or Life-Threatening Injury including Heart Attack and Strokes

1. Have the Security Guard call the paramedics (911). Tell them where the injured person is located and what is wrong. Have a safety representative meet EMS at the gate.
2. Provide first aid until paramedics arrive.
3. Bring AED unit to the incident site.
4. Have workers guide the paramedics to the injured person.
5. Call the EC, report status, and get instructions.
6. Fill out an accident report.
7. The Health and Safety Technician or designated person by EC will follow-up with the hospital where the injured person was taken and report information to EC.
8. If the injured person is hospitalized, contact his/her immediate family.
9. Contact the Department Manager and the Human Resources Manager.
10. Keep the accident scene from being disturbed.
11. Notify Cal/OSHA immediately if the person is hospitalized for at least 24 hours.

Fatality

1. Call the Fire Department (911) (only an EMS responder or the city coroner will pronounce death).
2. Keep the scene from being disturbed.
3. Call the EC, report status, and get further instructions from EC.
4. Find any and all witnesses.
5. Make notes on what happened.
6. Make no statements to Police or Fire Department. Let the EC or designated management person perform that task.
7. Contact the immediate family (Plant Manager).
8. Notify Cal/OSHA immediately.

APPENDIX A

EMERGENCY RESPONSE ACTION PACKAGE

CRISIS MANAGEMENT PLAN / CONTINGENCY PLAN SECONDARY LEAD SMELTER

Emergency Response Action Package

February 2005

Revised April 2006

Revised April 2010

Revised September 2011

Revised April 2012

Revised January 2013

Revised March 2013

Revised August 2014

Revised February 2015

Revised April 2015

Revised May 2015

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Facility Emergency Contacts

Persons authorized to act as Emergency Response Coordinators for this facility are identified below. The primary EC is designated on a weekly "on call" rotation. Copies of the monthly on-call roster are maintained at CP1, CP2, CP3, and at the guard gate. **If the primary EC on-call cannot be contacted, continue calling the others on this list until one is reached.** At least one of the Shift Supervisors listed below should be onsite at any given time to provide immediate onsite response assistance after-hours.

Emergency Coordinators and Alternates			
Name, Title, Address	**Telephone Numbers**		
	Plant	**Cellular**	**Home**
Nicolas Serieys Interim Environmental Manager	(323) 262-1101 **EXT. 259**	(310) 909-3884	
Laurel Johnson Safety Manager	(323) 262-1101 **EXT. 276**	(214) 475-1809	
John Hogarth Plant Manager	(323) 262-1101 **EXT. 275**	(323) 395 6130	(626) 345 5008
Rafael Perez Operations Manager	(323) 262-1101 **EXT. 241**	(818) 974-5358	
John Martinez Maintenance Supervisor	(323) 262-1101 **EXT. 226**	(323) 203 8864	(909) 923 4239
Mamun Hossain Materials Manager	(323) 262-1101 **EXT. 211**	(323) 816 3508	

Authorized Shift Supervisors (Onsite Coordinators)			
Name, Title	**Telephone Numbers**		
	Plant	**Cellular**	**Home**
Art Vasquez Smelting & Refining Manager	(323) 262-1101 **EXT. 286**	(626) 991 0755	
Lorenzo Carlos Shift Supervisor	(323) 262-1101 **EXT. 286**	(323) 216-9033	
Marshall Pitts Shift Supervisor	(323) 262-1101 EXT. 286		

Emergency Information

General Plant Information	
Plant Name	Exide Technologies Resource Recycling Division
Plant Physical Address	2700 South Indiana Ave. Vernon, CA 90058
Plant Mailing Address	Exide Technologies Resource Recycling P.O. Box 23957 Los Angeles, CA 90058
Owner/Operator	Exide Technologies 13000 Deerfield Parkway, Suite 200 Milton, GA 30004
EPA ID Number	CAD 097 854 541
SIC Code	3341 (Secondary Nonferrous Metals Smelter)
Plant Phone Number: Fax:	(323) 262-1101 (323) 269-1906

Providers of Emergency Response Assistance

The Vernon facility has or is in the process of reaching agreements for response and support services from the following local emergency agencies, medical service providers, and emergency response contractors.

Emergency Agency	Telephone Number
City of Vernon Fire and Rescue 4305 S. Santa Fe Ave., Vernon, CA 90058	911 or (323) 583-6331 (Emergency) (323) 583-4821 (Business)
City of Vernon Police Department 4305 S. Sante Fe Ave., Vernon, CA 90058	911 or (323) 587-8135 (Emergency) (323) 587-5171 (Business)
City of Vernon Department of Environmental Health	(323) 583-8811 (Emergency)
Los Angeles County Sheriff 4700 Ramona, Monterey Park, CA 91754	911 or (323) 526-5541
City of Vernon Fire — Emergency Number (Call for HAZMAT Dispatch)	(323) 583-6331
California Office of Emergency Services	1-800-852-7550
Local Emergency Response Administering Agency (City of Vernon Emergency Services)	911 or (323) 583-4821
Advanced Cleanup Technologies, Inc. 18414 S. Santa Fe Ave. Rancho Dominguez, CA 9022 1	(310) 763-1423
Environmental Recovery Services 2650 Lime Ave., Signal Hill, Ca 90806	(562) 427-7277

Providers of Emergency Response Assistance (cont.)

Emergency Medical Service Providers		
Service		**Telephone Number**
Ambulance / Emergency Medical Transport		911
	U.S. Health works 3851 Soto Street Vernon, CA 90058	(323) 585-7162
	Stacey Medical Center 4580 Pacific Blvd Vernon, CA 90058	(323)584-0779
	U.S Health Works (HOLIDAYS) 3430 Garfield Avenue Commerce, CA 90040	(323) 722-8481 (Holidays)
Hospitals:	White Memorial Medical Center 1720 Cesar Chavez Avenue Los Angeles, CA 90033	(323) 268-5000
	Los Angeles County USC Medical Center 1200 N. State Street Los Angeles, CA 90033	(323) 226-2622
	U.S Health Works (Outpatient Clinic Only) 3364 E. Slauson Avenue Los Angeles, CA 90058	(323) 584-7242

Providers of Emergency Response Assistance (cont.)

Response Contractor	Telephone Number	Contact
Environmental Recovery Services, Inc. 2650 Lime Avenue Signal Hill, CA 90806	(562) 427-7277	Debbie Avots
Bob Hill Hydraulic Crane 1390 East Burnett Street, Suite B Long Beach, CA 90806	(310) 426-6445	--
Economy Rentals 5511 Whittier Blvd. Los Angeles, CA 90022	(323) 723-9737	--
Advanced Cleanup Technologies, Inc. (ACTI) 18414 S. Santa Fe Avenue Rancho Dominguez, CA 90221	(310) 763-1423	Pete Espanza

Emergency Notification Procedures in Event of Chemical Spill

EXIDE Environmental (Call in Order until You Reach One Person)			
Name	**Home Phone**	**Work Phone**	**Fax**
Fred Ganster	N/A	610-921-4052	610-921-4062
Barbara Hatcher	N/A	678-566-9639	678-566-9650

Government Agencies			
Agency	**Phone**	**Level**	**Notification Required**
TSCA National Response Center (NRC)	(800) 424-8802	Federal	ASAP, verbal: if a release ³ RQ[1] impacts soil or any offsite receptor (air, water, soil, sewer, or person).
US EPA Region IX San Francisco Main Office Spill Line 24-Hour Technical Assistance	(415) 744-1529 (415) 744-2000 (415) 744-1450	Federal	A copy of any written notification sent to the California EPA should also be provided to the US EPA Region 9 Administrator.
California State Warning Center	(800) 852-7550	State	ASAP, verbal: if a release or threatened release.).
CA EPA Region 3 Dept. of Toxic Subst. Control	(818) 551-2800	State	Written, within 15 days: for any incident requiring implementation of this Contingency Plan.
California Chemical Emergency Planning & Response Commission		State	Written, within 30 days: if a release ³ RQ[1] impacts soil or any offsite receptor (air, water, soil, sewer, or person).
California OSHA Monrovia Field Office	(626) 256-7913	State	Verbal, within 8 hours: of the serious injury, death or, hospitalization of an employee for more than 24 hours.
Local Emergency Response Administering Agency (City of Vernon Emergency Services)	(323) 583-8811	Local	ASAP, verbal: if a release or threatened release.
City of Vernon Fire Emergency HAZMAT Dispatch	(323) 583-6331	Local	ASAP, verbal: in the event of possible or actual offsite exposure to or injuries resulting from materials released
LA County Sanitation District Duty Hours: After Hours:	(310) 699-7411 (310) 437-6520	Local	ASAP, verbal: if a release impacts sanitary or storm sewer system.

Reportable Spill Materials and Quantities

Material	Constituents of Concern	Reportable Quantity [B]	Estimated Quantity of Spilled Material to Reach RQ[A]
Lead and Lead Compounds (Dust)[A]	Lead	10 lb	10 lb
Lead-Bearing Scrap (Dust)[A]	Lead Arsenic Cadmium Antimony Copper	10 lb 1 lb 10 lb 5000 lb 5000 lb	10 lb ¸ Lead fraction 1 lb ¸ Arsenic fraction 10 lb ¸ Cadmium fraction 5000 lb ¸ Antimony fraction 5000 lb ¸ Copper fraction
Secondary Lead Smelting Furnace Flue Dust	K069 Listed Waste	10 lb	10 lb
Lead-Acid Batteries (spilled/leaked contents)	Lead Lead Corrosive Waste Sulfuric Acid	10 lb 10 lb 100 lb 1000 lb	10 lb lead paste ½ gallon electrolyte if ³5 mg/L lead 6.5 gallons electrolyte if pH £ 2 65 gallons electrolyte (15.3 lb/gal)
Spent Lead-Acid Battery Electrolyte	Lead Corrosive Waste Sulfuric Acid	10 lb 100 lb 1000 lb	½ gallon if lead content ³5 mg/L 6.5 gallons if pH £ 2 65 gallons (15.3 lb/gal)
Lead Paste / Desulfurized mud	Lead	10 lb	10 lb
Sulfuric Acid	Sulfuric Acid	1000 lb	65 gallons (15.3 lb/gal)
Nitric Acid	Nitric Acid	1000 lb	84 gallons (11.8 lb/gal)
Acetic Acid	Acetic Acid	5000 lb	570 gallons (8.75 lb/gal)
Lead Carbonate, $PbCO_3$	Lead	10 lb	12.9 lb (77.54% lead content)
Arsenic (Dust)[A]	Arsenic	1 lb	1 lb
Caustic Soda (Sodium Hydroxide)	NaOH	1000 lb	1000 lb as dry chemical (pellet/flake) 56 gallons of solution (17.8 lb/gal)
Potassium Hydroxide	KOH	1000 lb	1000 lb as dry chemical (pellet/flake)
Acetone	Acetone	5000 lb	757 gallons (6.6 lb/gal)
Methanol	Methanol	5000 lb	
Ferric Chloride	Ferric Chloride	1000 lb	1000 lb as dry chemical 41 gallons in solution (24.2 lb/gal)
Corrosive Hazardous Waste	pH £ 2 pH ³ 12.5	100 lb 100 lb	100 lb 100 lb
Toxic Hazardous Waste[C]	Lead, ³5 mg/L Arsenic, ³5 mg/L Cadmium, ³1 mg/L	10 lb 1 lb 10 lb	10 lb 1 lb 10 lb

Notes:

[A] If a released material consists of solid particles of antimony, arsenic, cadmium, chromium, copper, or lead with a mean diameter greater than 100 microns (0.004 inches), notification is not required (40 CFR §302.6).

[B] Notifications must be given for each component in a reportable spill for which an RQ is exceeded (*e.g., a 1,000 gallon spill of spent lead-acid battery electrolyte with pH less than 2 and lead content greater than 5 mg/L would be reportable as sulfuric acid, corrosive hazardous waste, <u>and</u> lead-bearing hazardous waste*).

[C] Constituents of concern levels for these materials represent the toxicity characteristic leaching procedure extract concentrations if the waste is a solid, or the actual component concentrations if the waste is a liquid (see 40 CFR §261.24).

<u>Note</u>: Notification to the City of Vernon and the California State Warning Center is required for releases or threatened releases under the Reportable Quantities if they pose a hazard to human health and safety, environment, or property (notification should be made even if the impacts are potential or delayed).

Sanitary Sewer Agencies

Agency:	Phone:
Los Angeles County Sanitation District (Trunk sewers and treatment plants)	
Supervising Industrial Waste Inspector: (Business Hours: 9-5 on weekdays only)	(562) 699-7411 Ext. 2907
Long Beach Pump Plant: (24-Hour reporting, incl. weekends, & holidays)	(562) 437-6520
General Information (Industrial Waste Section): (Business Hours: 9-5 on weekdays only)	(562) 699-7411 Ext. 2900
City of Vernon (Local Sewer System Authority & City Engineer — 24 hours)	(323) 583-8811

Sanitary Sewer Drainage System Information

Vernon Facility

Site Street Address:	Phone:
2700 South Indiana Street Vernon, CA 90058	(323) 262-1101

Sanitary Sewer Plant

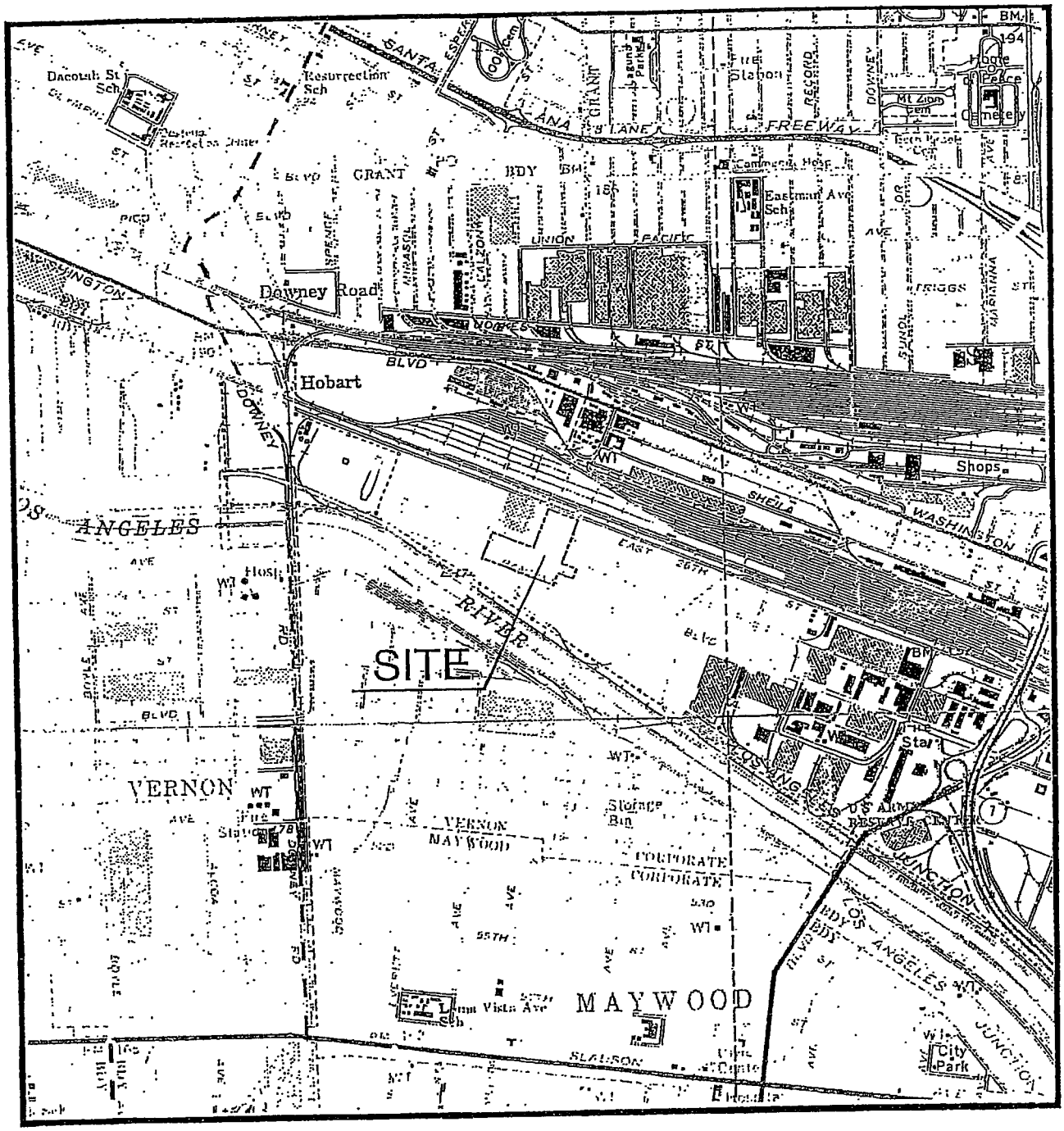
Street Address:	Phone:
Los Angeles County Sanitation District Joint Water Pollution Control Plant 24501 South Figueroa Street Carson, CA 90745	(323) 775-2351

Surface Drainage Area Emergency Agencies

Agency	Phone
City of Vernon Fire Emergency: HAZMAT Dispatch	(323) 583-6331
California State Warning Center:	
24-Hour Warning Center	(916) 262-1621
24 Hour Hazardous Material Spill Reporting	(800) 852-7550
(To obtain a Spill Incident Control Number)	
Los Angeles County Department of Public Works	
24 Hours	(626) 458-4357

Surface Drainage Basin Authority

Los Angeles County Sanitation District:	
Duty Hours (Weekdays 9-5, only)	(562) 699-7411
Off Hours (24 Hour notifications)	(562) 437-6520



SCALE 1:24000

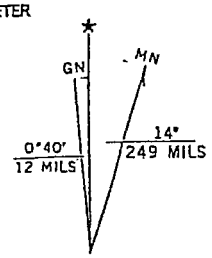
1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

QUADRANGLE LOCATION

Contour interval: 20 feet
Source: Composite of Los Angeles & South Gate, California, 7.5 Minute Series, U.S.G.S. Topographic Maps



UTM GRID AND 1994 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

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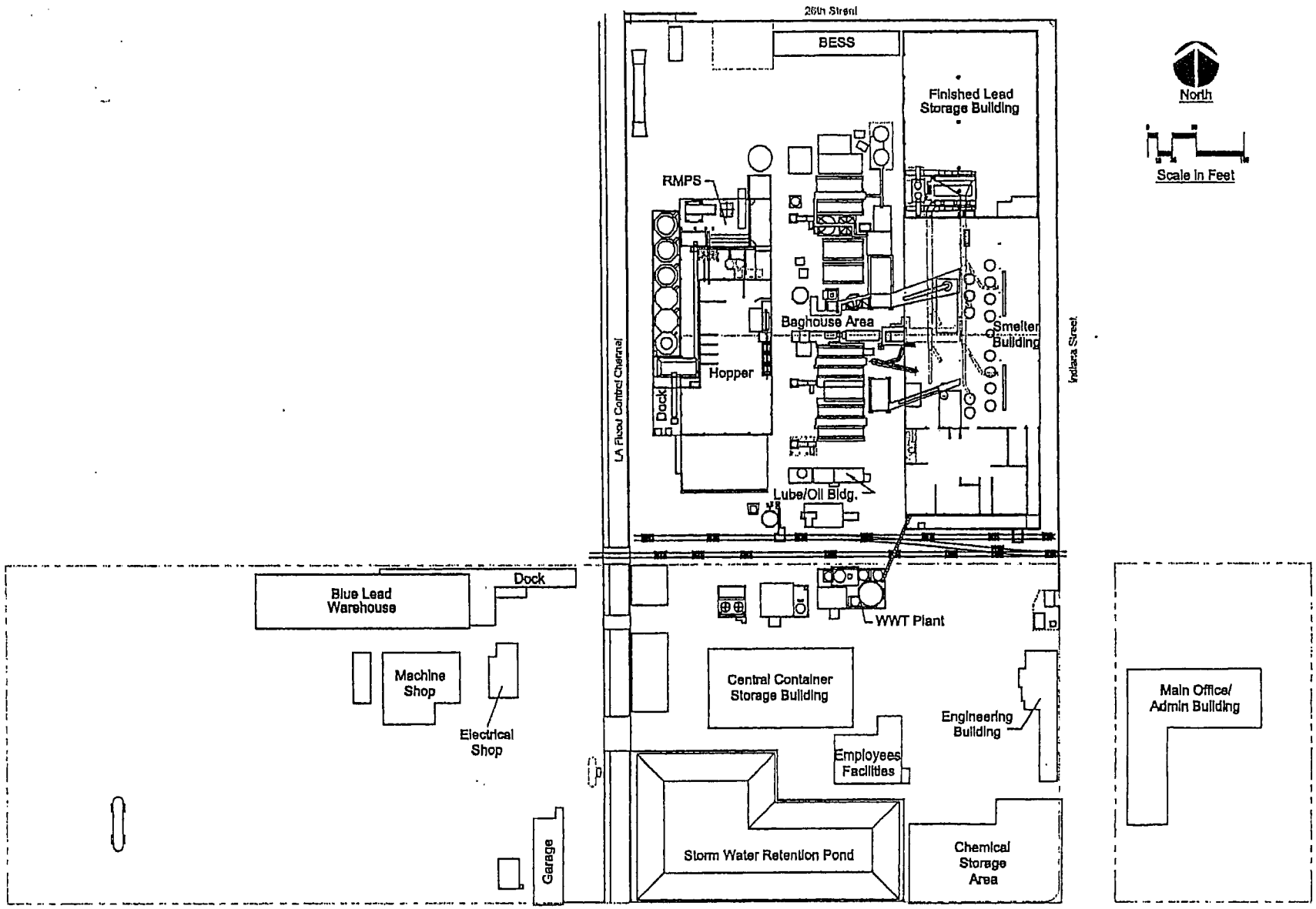
Exide Technologies - Vernon, California

FACILITY LOCATION MAP

FIGURE 1



Exide Corporation - Vernon, California

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FIGURE 2

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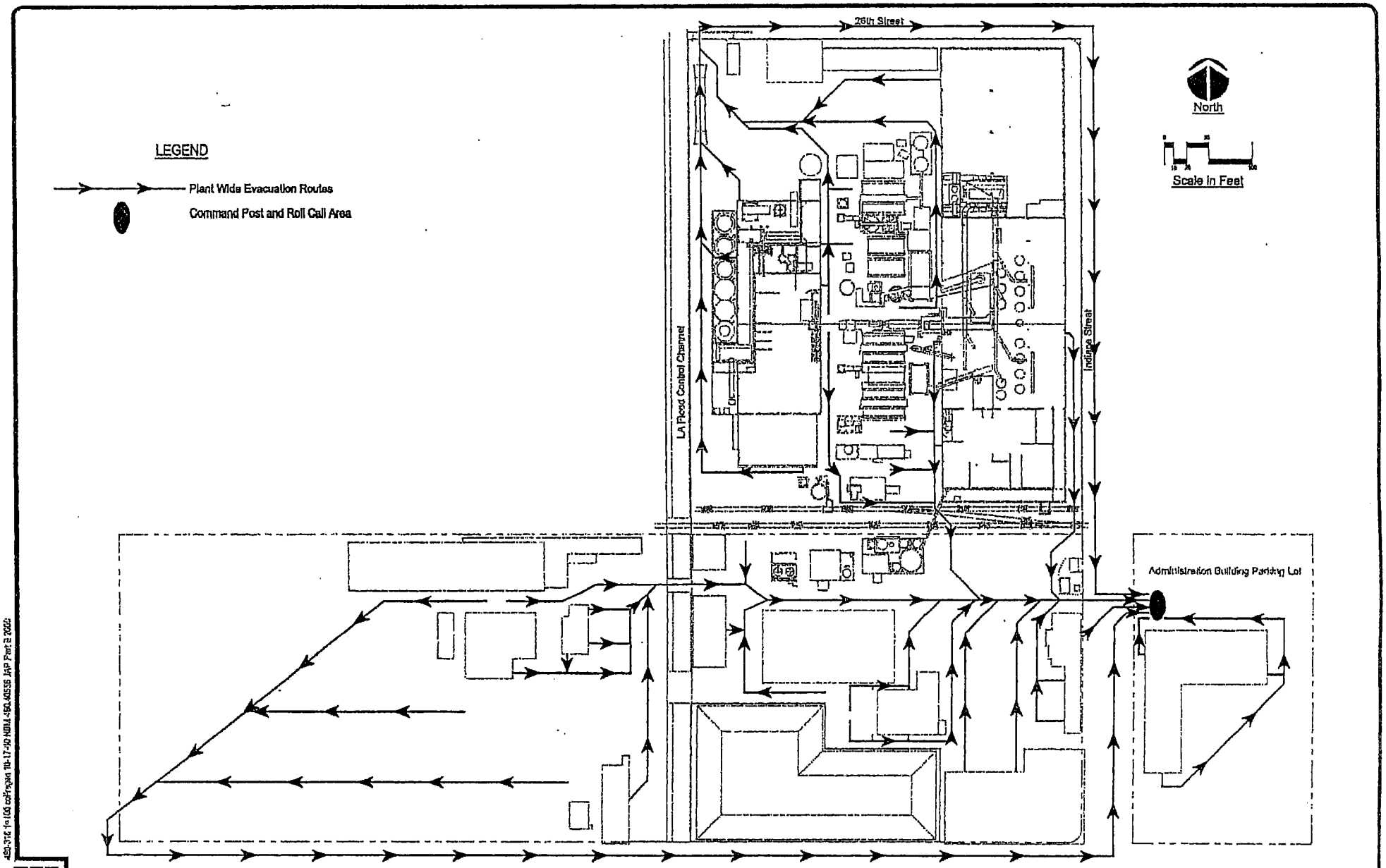
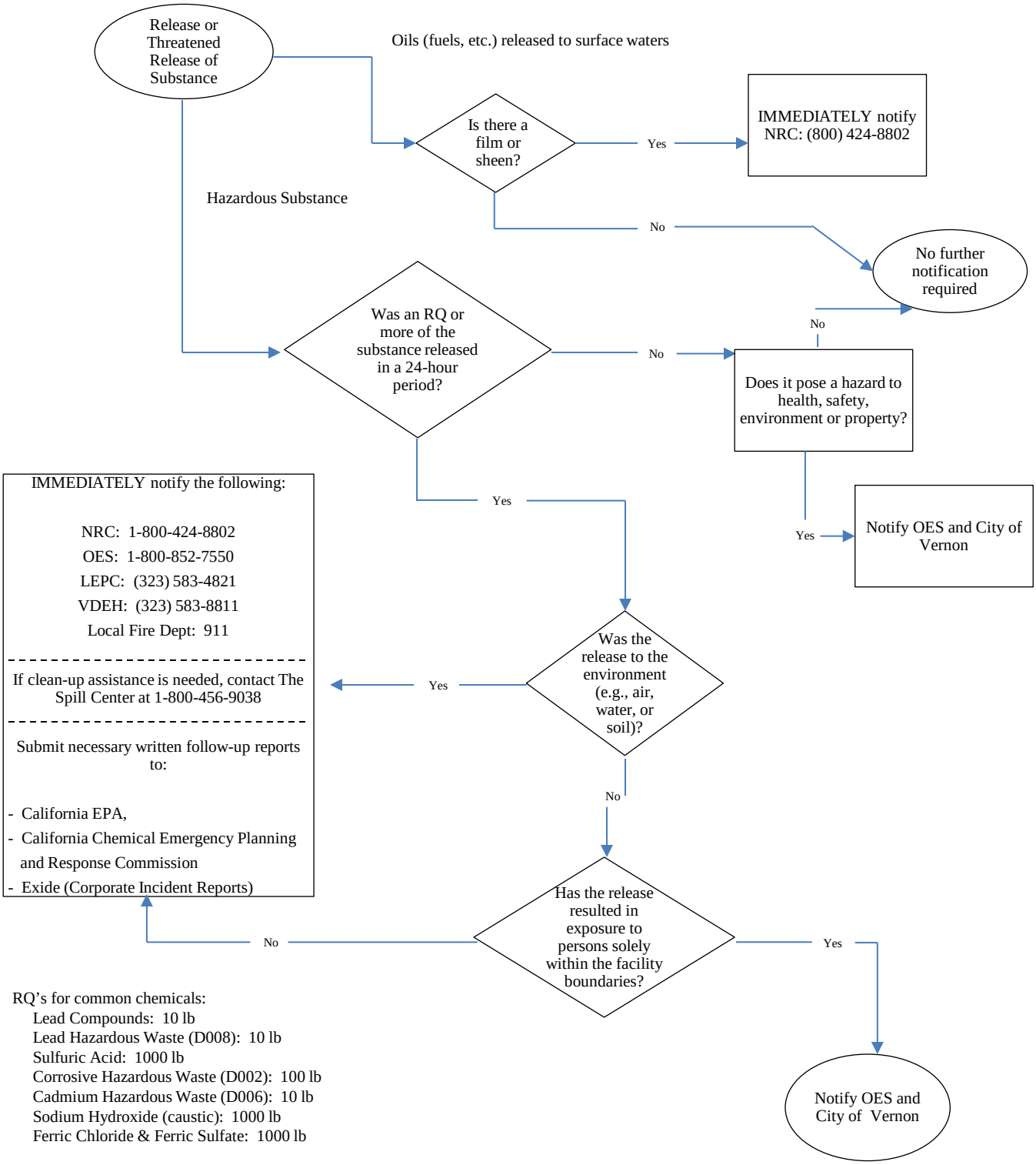


Exide Corporation - Vernon, California

PLANT WIDE EVA ATION ROUTE PLAN

FIGURE 3



RQ's for common chemicals:

- Lead Compounds: 10 lb
- Lead Hazardous Waste (D008): 10 lb
- Sulfuric Acid: 1000 lb
- Corrosive Hazardous Waste (D002): 100 lb
- Cadmium Hazardous Waste (D006): 10 lb
- Sodium Hydroxide (caustic): 1000 lb
- Ferric Chloride & Ferric Sulfate: 1000 lb

(Refer to 40 CFR 302 for a complete list of CERCLA hazardous substances and 40 CFR 355 Appendix A for extremely hazardous substances.)

CRISIS MANAGEMENT GUIDE

Response Steps:

1) Contain and Isolate Spill to Minimize Impact and Prevent Worsening of Situation, if Possible
2) Contact Plant Shift Supervisor for Direction
3) Contact Plant Emergency Coordinator
4) Evaluate Situation and Establish Plan of Attack
5) Identify Required Resources
6) Implement Emergency Contingency Plan if Necessary
7) Alert Plant Personnel and Offsite Agencies as Required
8) Reevaluate Progress and Alter Actions if Necessary
9) Continue Items 4-8 Until Situation is Under Control
10) Confirm That Danger is Over
11) Establish Cause for Incident and Long Term Impact
12) Take Control Action to Prevent Future Incidents
13) Debrief and Review Performance of Plant Emergency Response Team
14) Modify Plan to Cover Shortfalls Discovered During Incident
15) Review Modified Plan and Include in Emergency Contingency Plan

Emergency Coordinator Response Action Checklist

Yes ✔	NA ✕	Action Item
		1. Activate internal communication systems and notify all plant personnel.
		2. Initiate spill containment and control, process shut downs, and evacuations; direct assistance to injured personnel; and mobilize other onsite emergency response activities as necessary.
		3. Notify appropriate State or local response agencies with designated and assigned responsibilities if their assistance is needed.
		4. Determine the character, source, amount, an areal extent of any released materials.
		5. Assess potential hazards to human health or the environment that may result from the emergency.
		6. Report the emergency if it is determined that conditions exist that have or may threaten human health and the environment by providing verbal notification of the situation to the local emergency administering agency, the state Office of Emergency Services, and the National Response Center (NRC).
		7. Report releases greater than reportable quantities of any chemical or hazardous material/waste for which release reporting is required (a release which impacts soil or an offsite receptor -- air, water, soil sewer, or person) to the California Office or Emergency Services and the National Response Center.
		8. Perform necessary actions to ensure fires, explosions, and releases do not occur, recur, or spread.
		9. Monitor plant for leaks, pressure build-up, gas generation, and ruptures in pipes, tanks, or other equipment if the plant stops operation due to fire, explosion, or release.
		10. Perform necessary post emergency actions to manage waste residues that result from the emergency.
		11. Perform required post emergency actions to ensure against contact or mixing of wastes or incompatibles with the released material, and ensure that all emergency equipment listed in the plan is cleaned and ready for use before resuming plant operations.
		12. Notify the Director at the CA EPA and local authorities that the plant has completed the post emergency actions in affected areas prior to resuming plant operations.
		13. Generate a report of the emergency for the plant operating record (if the emergency required implementation of the Contingency Plan).
		14. Prepare and submit Corporate Incident and Lost Time Incident Reports as applicable.
		15. Submit a report to the CA EPA within 15 days of the incident (if it required implementation of the Contingency Plan).
		16. Submit a report to the California Chemical Emergency Planning and Response Commission (CEPRC) within 30 days of the incident (if any chemical was released in excess of its reportable quantity).

CRISIS MANAGEMENT PLAN/CONTINGENCY PLAN ELEMENTS

1.0 DISCOVERY

The plan is designed to minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous materials to air, soil, surface water, or groundwater. The provisions of the plan will be carried out immediately whenever there is such an emergency which could threaten human health or the environment.

The following situations will constitute an emergency requiring implementation of the plan:	
Injury to employee	When the injury is of a serious enough nature that medical attention above the level of first air is required.
Major spills or releases	When the spill could cause the release of toxic materials and/or corrosive liquid to the environment as follows: • The release/spill can be contained on-site, but the potential exists for groundwater contamination; • The release/spill cannot be contained on-site; or • The release/spill cannot be brought under control within ten minutes.
Fires and explosions	When a fire is discovered or an explosion occurs and the situation cannot be brought under control within a reasonable amount of time with the equipment on-hand.

Emergency procedures will be executed for any event associated with hazardous materials or hazardous waste involving any possible danger to personnel, equipment, or the environment. Situations that (1) occur entirely within the plant; AND (2) are totally contained with no threat to personnel or the environment, do not require formal implementation of this plan; however, applicable spill procedures in the plan should be used during clean-up operations for any minor spill events that may occur.

2.0 CONTINGENCY PLAN IMPLEMENTATION

The procedures contained in this Contingency Plan will be carried out immediately whenever there is a fire, explosion, or release that could threaten human health and the environment. The release of small quantities of process materials, reagents, or hazardous waste from plant areas that **do not pose** a potential for fire, explosion, off-site run-off, groundwater contamination and can be cleaned up using routine procedures, **will not cause** the Contingency Plan to be activated. In cases where chemicals are spilled outside of buildings in quantities less than the reportable quantity (RQ) and the spill does not pose a potential for air release and is contained on-site, the Contingency Plan **will not be activated**. The emergency procedures presented in this Crisis Management Plan/Contingency Plan should be used to mitigate minor emergencies that do not require Contingency Plan activation.

3.0 RESPONSES TO EMERGENCIES

The Contingency Plan will be activated in case the emergency is a fire, explosion, or release of hazardous waste or hazardous materials of sufficient magnitude to threaten human health and the environment. Detailed employee emergency response guidelines are presented in Section 6. The following list summarizes the response actions that will be performed during significant emergencies:

Fires and Explosions — When a fire or explosion is observed onsite, employees shall notify an authorized supervisor. The supervisor will call the Emergency Coordinator (EC) to assess the situation. If the fire requires more than two fire extinguishers to be used or if an explosion is not contained, then the EC shall activate the Contingency Plan by contacting 911 to notify City of Vernon Fire and Rescue. The EC will coordinate subsequent response activities and any necessary process shut-downs.

Train Derailments — In the event a train derailment impacts the facility, employees should remain in their work areas unless directed to vacate by the EC or area supervisor. The EC shall be notified and will implement the contingency plan as necessary in response to the level of plant disruption due to the accident. Potential emergency scenarios include injuries, damage to buildings and other onsite structures, fire, power supply disruption, and the possible release of hazardous materials/wastes if a rail car or debris impacts a tank, bag house, storage area, pipeline, etc.

Regulated Tank Leak or Failure — In the event of a leak or failure of a tank onsite, employees shall contact an authorized shift supervisor and the EC. Emergency responders using appropriate personal protective equipment should stop the flow of product, and work to contain the spill to minimize the area of impact. The tank should be immediately taken off line, and downstream processes supplied by it, or upstream processes contributing to it should be shut down (or process flows diverted to or from backup or redundant tanks). The EC shall make emergency notifications as necessary, and direct and coordinate the efforts to contain, collect, neutralize, and dispose of the recovered materials.

Hazardous Material / Waste Spills — For hazardous material/waste spills or overflows of hazardous liquids, employees shall notify an authorized supervisor of the emergency. The supervisor will contact the EC and provide him/her with the facts necessary to assess the situation. If a spill or overflow cannot be contained on-site, or if a hazardous liquid overflows emergency containment prior to on-site treatment, the EC will activate the Contingency Plan and direct response efforts to mitigate the incident. The EC shall contact 911, other emergency agencies, and response contractors as necessary to provide emergency response assistance and provide necessary spill notifications to the appropriate government agencies (including the local POTW and sanitation district if sewer or storm drainage systems are or may be impacted). The EC shall also oversee the proper handling and disposal of recovered or treated hazardous materials, wastes, and residues.

Acid Spills — If an acid spill is detected, employees shall inform an authorized supervisor, who will then notify the EC of the situation. Initial response actions by employees using appropriate personal protective equipment should be directed at stopping any acid flows from the contributing

sources and containing the released material, if possible and safe to do so. The EC shall make emergency notifications as necessary, and direct and coordinate the efforts to contain, collect, neutralize, and dispose of the recovered materials.

Oil Spills — Petroleum products such as vehicle fuel leaks or fuel oil delivery leaks should be controlled in an appropriate manner to prevent discharges to air, soil, and water. Detailed procedures for handling oil spills at this facility are included in the Spill Prevention Control and Countermeasures (SPCC) Plan maintained separately from this document.

Electrical Failures — Electrical failures will be reported by employees to their supervisor. The supervisor will call maintenance regarding the cause of the power outage. If electrical outage is area wide or plant-wide, the supervisor will call the EC who will determine if outage is significant. The EC or designated employee will call the electric company to determine if the duration of the electrical outage is predicted to be longer than two hours or the cause of the outage cannot be fixed quickly. If the duration of the electrical outage is longer than two hours, the EC will either arrange for long-term emergency back-up electrical power, initiate process shut-down procedures, direct any necessary plant-area evacuations, and call 911 to obtain additional assistance, if required.

Gas Leaks — If a natural gas leak is detected, the employee will call an authorized supervisor. The supervisor will call maintenance. Maintenance will shut off the service to and isolate the area. The area will be tested for explosivity by calibrated portable meters. If the meter indicates high gas levels, higher than methane (propane, if used) Lower Explosive Limit (LEL), the area will be isolated and the maintenance supervisor will call the EC and communicate event details. The EC will activate the Contingency Plan if the gas concentration does not return to normal background levels in ten minutes.

If there is a service outage, the employee will call an authorized supervisor. The supervisor will call maintenance to shut off the service main to plant and call the EC. The EC will work with the gas company to resolve the gas outage. During the event, the EC will direct maintenance personnel to monitor natural gas pipe lines, gas fired equipment, burners, and associated systems. The EC will coordinate plant process shut-downs (where necessary) and subsequent start-up operations after the gas service interruption.

Sewer/Wastewater Overflows — If a sewer or wastewater overflow is observed, the employee will call the shift supervisor. The supervisor will call the EC and give details of the event. If the sewerage or wastewater is going off-site then the Contingency Plan will be activated. The EC will coordinate subsequent activities necessary to mitigate the incident.

Natural Disasters — For natural disasters, the EC and/or designated employee will monitor weather reports to assess the magnitude of the weather.

Serious Health Injuries — For serious health injuries including heart attacks, strokes, and fatalities, the employee will call the supervisor. The supervisor will call 911 and the EC to communicate the status of the situation. The EC will advise the supervisor or designated person to

watch injured person and wait for emergency medical responders. The EC will coordinate the additional response and follow-up activities.

Floods — For floods, the plant's lower elevations or flood-prone areas will be monitored, and required diking and stabilization of perimeter walls or drainage channels will be performed; the EC will activate the Contingency Plan if an operation area, utility area, water supply/water treatment area is flooded.

Earthquakes — After the initial shock, the EC on site shall monitor the situation and give the evacuation signal when the immediate threat of aftershocks has passed. After the plant is evacuated, the EC will implement the contingency plan as necessary (and to the extent possible if it is deemed unsafe to re-enter the plant). Utility feeds (gas, water, and electricity) to the facility should be shut off if there is evidence that the lines have been damaged or if this action is requested by local emergency management agencies.

Public Disturbance / Riot — In the event of a civil disturbance outside or near the facility, employees should lock outside entrances to buildings and secure the facility perimeter (close/lock gates, etc.). Remain inside the plant and continue normal work activities. If the situation warrants, the EC may order process shut downs as necessary. Personnel should not leave the facility until permitted to do so by the EC or a plant supervisor.

Internal Labor Dispute / Strike — The main threat to the facility during a labor dispute is sabotage or vandalism. Plant management and non-striking employees should initiate the orderly shut down of non-critical or threatened plant processes, and these areas should be secured and monitored by plant security. The plant as a whole and any processes still in production should also be protected, and employees should be on the alert for potential problems. The EC shall implement the contingency plan as necessary in response to any emergency situation that might arise.

Other Events — For events including bomb threats, vandalism, and sabotage - the employee will report the incident to the supervisor. The supervisor will notify the EC, who will collect the facts and determine if the Contingency Plan should be activated.

In events involving natural gas, liquefied petroleum gas, or compressed propane gas, the response action should be performed in accordance with the vendor's/supplier's directions and with assistance from the local fire department.

In the event of a Y2K-related malfunction, including internal problems in the facility (PCs, Programmable Logic Controllers, Electronics Components or other embedded systems) or external problem with the local Utilities (Electrical Power, Natural Gas, Propane, Water or Telecommunications) refer to the facility's ***Y2K Contingency Plan*** and contact one member of the facility **Y2K Emergency Response Team**.

The site-specific procedures to be performed during the emergencies that require Contingency Plan implementation are presented in **Section 7.6** of the complete plan.

4.0 EMERGENCY EQUIPMENT

The Vernon facility maintains fire control equipment (water hydrants and hoses), portable fire extinguishers (including special extinguishing agents such as foam, inert gas, or dry chemicals), spill control equipment, and decontamination/neutralization materials and equipment to allow facility personnel to quickly and effectively respond to onsite emergencies. Emergency eye wash stations and showers are located throughout the plant. **Appendix B** of the complete plan presents itemized inventories and descriptions of the emergency equipment maintained at the facility and figures showing the locations where these items are located or stored. In the event that the onsite resources are not sufficient to respond to an emergency, then the EC will contact emergency agencies and response contractors as necessary for help.

5.0 EVACUATION PLAN

Any evacuation of the facility will be by the normal emergency evacuation procedures as posted within the buildings. This plan includes evacuation procedures for all areas of the plant whether involved in hazardous waste operations or not. **Figure 3** of this action package shows the overall plant-wide evacuation route plan for the facility. All personnel located south and immediately north of the railroad tracks will evacuate the facility and meet at the Administrative Building parking lot for roll call. All remaining personnel located north of the railroad tracks will evacuate the facility through the 26th Street gate and travel toward the Administrative Building parking lot for roll call. Detailed evacuation routes for each individual plant area are presented in **Appendix C** of the complete plan.

Each of the area evacuation plans denotes both primary and secondary evacuation routes for use in the event that fire or hazardous material/waste blocks the primary routes. Should evacuation of any building be required, all evacuated personnel will move to a designated assembly point away from the location of the emergency.

The signal to start any evacuation shall be given by the shift supervisor and/or the Emergency Coordinator. The signal to begin an evacuation will be transmitted by direct verbal communication or by two-way radios to supervisors in each production area.

If it is unclear whether or not to evacuate a particular area, the area should be evacuated until the Emergency Coordinator makes a determination. Any evacuation of the surrounding properties will be coordinated through the local fire and police departments.

TELEPHONE NOTIFICATION FORM FOR REPORTABLE RELEASES

Call the following agencies and provide the information indicated below to the extent it is known. (Do not delay notification in order to collect this information.)

National Response Center:	**1-800-424-8802**
Local Emergency Response Administering Agency:	**(323) 583-4821**
California State Warning Center:	**1-800-852-7550**
City of Vernon Department of Environmental Health:	**(323) 583-8811**

1. Name and phone number of the person making the report (notification):

_____

_____

_____

2. Name and address of the facility:

Exide Technologies
Resource Recycling Division
2700 South Indiana Avenue
Vernon, California 90058
(323) 262-1101

3. Type of incident (e.g., spill, fire, explosion):

_____

_____

_____

4. Time, location, and duration of incident/release:

5. Names and quantities of any chemicals or substances released (to the extent known):

6. Identify any released materials that are listed as extremely hazardous substances in Appendix A of 40 CFR 355.

7. List media affected by the release (e.g., air, soil, water, offsite persons):

8. Identify any known or anticipated acute or chronic health problems and any advice regarding medical attention that may be necessary for exposed individuals:

9. Necessary actions to be taken as a result of the release (e.g., area evacuations):

10. Extent of injuries, if any:

11. Possible hazards to human health or the environment outside the facility:

CONTINGENCY PLAN IMPLEMENTATION REPORT

TO

THE CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

Department of Toxic Substances Control Reg. 3

9211 Oakdale Avenue

Chatsworth, California 91311

(To be submitted within 15 days of any incident requiring implementation of this Plan.)

Exide Technologies

Resource Recycling Division

2700 South Indiana Avenue

Vernon, California 90058

(213) 262-1101

1. Name and telephone number of individual making report:

2. Name and address of plant (see above).
3. Attach a copy of the Telephone Notification Report.
4. Estimated quantity and disposition of recovered material that resulted from the incident:

5. Cause of occurrence:

6. Period of occurrence, including exact dates and times:

7. Time occurrence expected to continue (if not already corrected):

8. Steps taken or planned to reduce, eliminate, and prevent recurrence:

California Emergency Release Follow-up Notice Reporting Form and Instruction Sheet

The following form is to be submitted to the California Chemical Emergency Planning and Response Commission (CEPRC) within 30 days of any release of a substance in excess of its reportable quantity which impacted soil or any offsite receptor (air, water, sewer, soil, or person).

APPENDIX B

EMERGENCY RESPONSE EQUIPMENT

TABLE B-3
EXIDE TECHNOLOGIES MOBILE EQUIPMENT LIST

Equipment Number:	Description	Department
21	Yale Forklift	Maintenance
476	Manlift (Bragg Crane)	Maintenance
493	Golf Cart	
497	Electrical Manlift	Maintenance
498	Ford Pick-up Model F-350	Maintenance
515	Ottawa Tractor Model YT30	Receiving
517	Sweeper - Tennant Model 95	Plant Services
518	Sweeper - Tennant Model 95	Plant Services
520	Ottawa Truck - Model 30	Shipping/Warehouse
527	Lincoln Welder - Diesel	Maintenance
528	Miller Welder - Gasoline	Maintenance
531	Golf Cart	Maintenance
539	Waldon	Blast
540	SISU	RMPS
548	Komatsu Fork Truck	Shipping
550	Komatsu Fork Truck	Shipping
551	Komatsu Fork Truck	Shipping
557	Tennant Scrubber	Environmental
558	Tennant Scrubber	Environmental
562	Golf Cart	

TABLE B-5
OUTSIDE SOURCES FOR EQUIPMENT AND MATERIALS

Item	Supplier	Telephone	Contact
Soda Ash	Searles Valley 13200 Main Street Trona, CA 93592-0367	(760) 372-2291 (800) 424-9300	Dave Barrett (CHEMTREC)*
Potassium Hydroxide Flake, Caustic Soda Flake, Sulfuric Acid, Sulfur, Sodium Nitrate Ferric Chloride Solution	Miles Chemicals 12801 Rangoon Arleta, CA 91331	(818) 504-3355 (800) 424-9300	Gary Marka (CHEMTREC)*
Liquid Caustic Soda	BCS. 12522 Los Nietos Road Santa Fe Springs, CA 90670	(565) 944-7244 (800) 424-9300	John Grimes Gene Van Dyke George Gray (CHEMTREC)*
	Pioneer 700 Louisiana St., Suite 4650	(800) 343-2388 (800) 334-9503 (800) 424-9300	24 hr emergency Number 24 hr emergency Number Houston, TX 77002 (314) 598-2850 Kevin Gregory (CHEMTREC)*
Liquid Oxygen	BOC Gasses 680 N. Baldwin Park Blvd. City of Industry, CA 91746-1501	(626) 369-2886 (800) 232-4726	Jim Smith Emergency Number

* CHEMTREC is an emergency information provider contracted by chemical supply companies. They can provide information regarding the hazards associated with different chemical spill scenarios.

TABLE B-5
OUTSIDE SOURCES FOR EQUIPMENT AND MATERIALS
(Continued)

Item	Supplier	Telephone	Contact
Propane	Ted Johnson 5140 North Elton Baldwin Park, CA 91706	(626) 337-1222	Ramon Diaz
Diesel Fuel	Southern Counties Oil Co. 1825 West Collins Orange, CA 92670	(800) 633-8253 (800) 255-3924 (714) 744-7140	24 hr Emergency Response Transportation Emergency
Munivez PM 605 (inhibitor), OX 103 (biocide), NC 106 (biocide)	Long Beach, CA 90815	(562) 602-7251	Steve Lenhart
Skip Loaders, **Cranes**	Bob Hill Hydraulic Crane 1390 East Burnett Street Suite B Long Beach, CA 90806-3599	(562) 426-6445 (800) 924-6445	24 hr. ans. service will xfer you to person on-call.
Miscellaneous Equipment	Economy Rentals 5511 Whittier Blvd. Los Angeles, CA 90022	(213) 723-9737 (323) 728-8259	John Meek Russ John Meek (24 hr number)
Tank Trucks	Bulk Transportation 415 S. Lemon Ave. Walnut, CA 91789-2911	(909) 594-2855	
Tank Trucks, Dump Trucks, Manpower, Earth Moving Equipment	OC Vacuum 4317 Downey Road Vernon, CA 90058	(323) 587-0234	

TABLE B-5
OUTSIDE SOURCES FOR EQUIPMENT AND MATERIALS
(Continued)

Item	Supplier	Telephone	Contact
Hazardous Waste Management Assistance	Env. Recovery Services, Inc. 2650 Lime Avenue Signal Hill, CA 90806	(562) 427-7277	Debbie Avots
Environmental and Geotechnical Engineering, Soil Coring and Boring, Soil Sampling,	E2 Environmental, Inc. 15375 Barranca Parkway, B-202 Irvine, California 92618-2213	(949) 453-8085	Dennis England dcengland@e2env.com
Lab Analysis			
	Advanced GeoServices 1055 Andrew Drive, Suite A West Chester, PA 19380	(610) 840 9100	Paul Stratman
	Calscience Environmental Laboratories 7440 Lincoln Way Garden Grove, CA 92841-1432	(714) 895 5494	Kim Banks
Emergency Response	Advanced Cleanup Technologies, Inc. 18414 S. Santa Fe Avenue Rancho Dominguez, CA 90221	(310) 763-1423	Pete Espanza
	Environmental Recovery Services 2650 Lime Avenue Signal Hill, CA 90806	(562) 427-7277	Debbie Avots Jim Scott

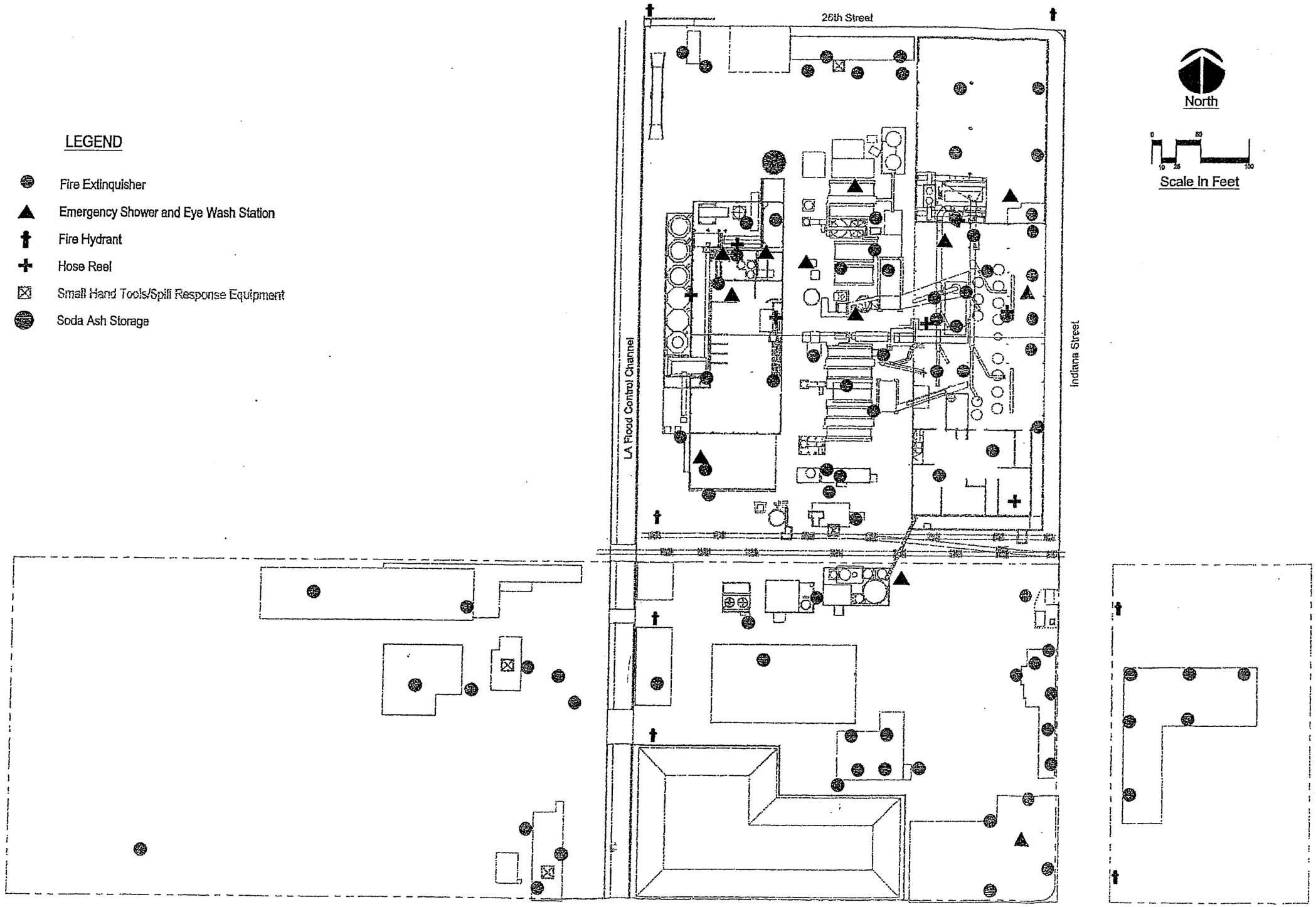
TABLE B-6
EMERGENCY EQUIPMENT LIST

On Site	Description/Capabilities	Location
Fire Extinguishers	General Firefighting	Throughout Plant see **Table B-1**,and **Figure B-1**
Fire Hoses (7 each)	General Firefighting	See **Figure B-1**
Fire Hydrants (5 each)	General Firefighting	See **Figure B-1**
First Aid Kits	Minor Emergency First Aid	Plant Services Maintenance Shop RMPS C-P1 Smelting C-P2 Refining C-P4 Administration Mobile Maintenance
AED Units	Emergency First Aid	Smelting C-P2 Main Guard Station
Soda Ash	Acid Neutralization	See **Figure B-1**
Mobile Equipment	Moving Pallets and Bulk Materials	Throughout Plant (See **Table B-3**)
Telephones	Coordination and Control	Administrative Building Guardhouses Scalehouse Smelting Building Refinery Garage Water Softening Building
	Buildings	Employee Facilities RMPS Laboratory Maintenance Shop
Two-Way Radios (20 each)	Coordination, Control, and Alarm Communications	Throughout Plant

TABLE B-7: STORED CHEMICAL LOCATIONS

No.+	Location	Chemicals
1	Diesel Aboveground Storage Tank	Diesel
2	BESS	Lead-acid Batteries - (Spent)
3	Sulfuric Acid Totes (4)	Sulfuric Acid
4	Finished Lead Storage Building	Lead Pigs and Ingots
5	Soda Ash Storage Tank	Soda Ash
6	Caustic Tank	Caustic Soda
7	Ferric Chloride Tank	Ferric Chloride
8	RMPS	Lead Lead Carbonate Soda Ash Sulfuric Acid
9	Reverb Furnace Feed Room	Lead Lead Carbonate (Raw Materials) Red Base Sweeping Compound
10	Smelter Building	Aluminum Calcium Caustic Soda Charcoal Arsenic Sulfur Potassium Hydroxide
11	Canopied Container Receiving Building	Open - Bin 101-102
12	Liquid Nitrogen Tank	Liquid Nitrogen
13	Caustic Tank	Caustic Soda
14	Lube/Oil Building	Hydraulic Oils
15	Blast Furnace Feed Room	Blast Slag Coke Iron Lead Reverb Slag Dross (Tin, Antimony)
16	West Container Receiving Building #2	Lead Acid Batteries - (Spent)
17	West Container Receiving Building #1	Lead Acid Batteries - (Spent)
18	Central Container Receiving Building	Lead Acid Batteries - (Spent)
19	Wastewater Treatment Plant	Sodium Carbonate Molybdate Phosphate Polymer Salt Aqua Floc 406, 2402C
20	Propane Tank	Propane
21	Engineering Building Water Lab*	Acetic Acid Acetone Acetylene Argon Nitric Acid Methanol
22	Warehouse*	Paint Paint Thinner
23	Machine Shop	Acetylene Cleaning Solvent Oxygen
24	Electrical Shop	Acetylene Hydraulic Fluid Oxygen
25	Mobile Maintenance (Garage) Building	Diesel Fuel Cleaning Solvent Hydraulic Fluid Motor Oil
26	Chemical Storage Area	Sulfur, Tin, Metal, Arsenic, Calcium, Copper, Antimony, Selenium

+ Numbers refer to plant areas as shown on Figure B-3 * Small quantities

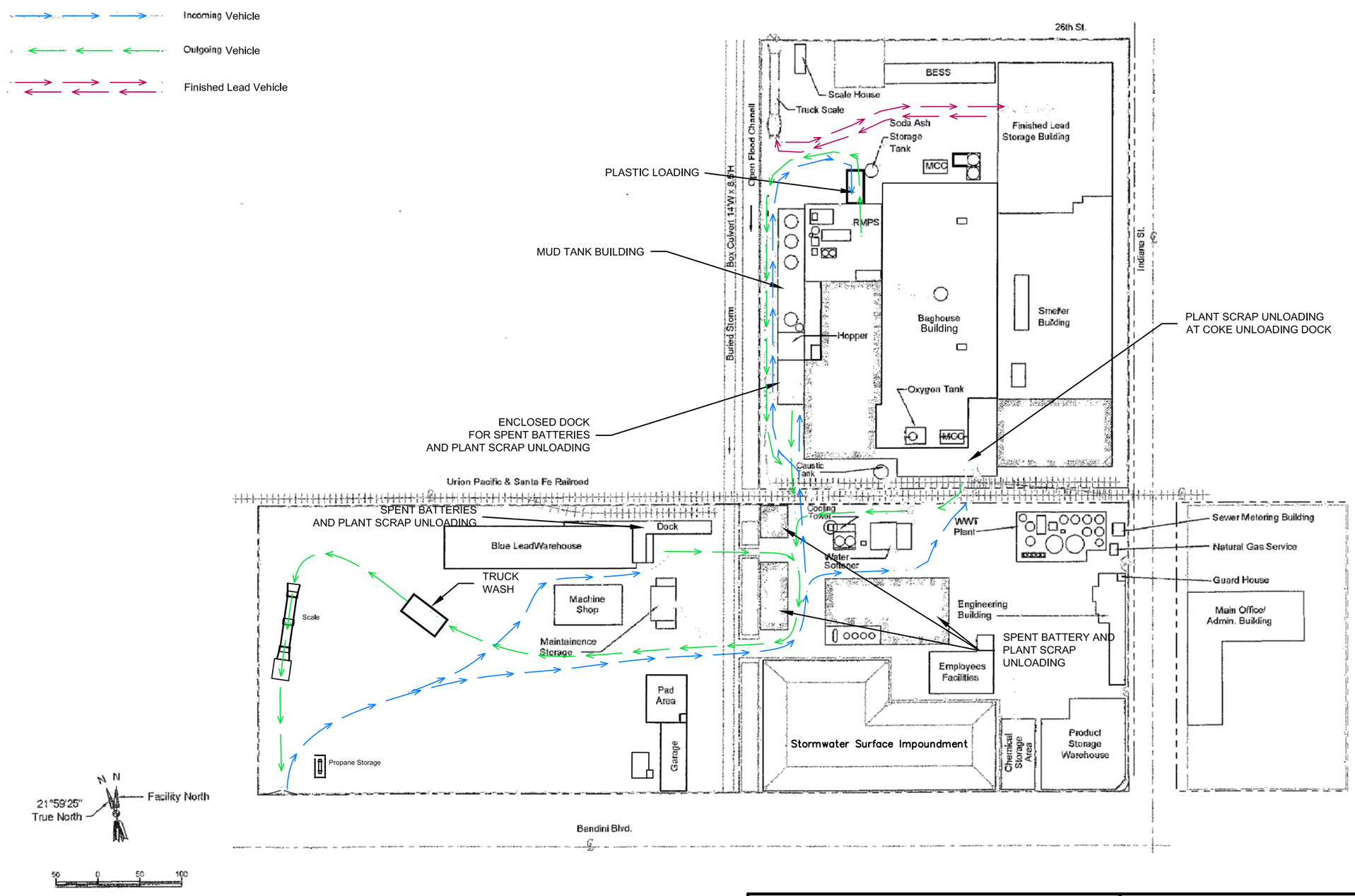


Exide Corporation - Vernon, California

LOCATIONS OF ALL EMERGENCY EQUIPMENT

FIGURE B-1

490-318 1=100 col 10-17-00 NBM 490-40556 JAP Part B 2000



NOTE:

1. ADAPTED FROM LAKE ENGINEERING FIGURE 2.4 FROM PART B APPLICATION, MAY 2002.

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TRAFFIC PATTERNS

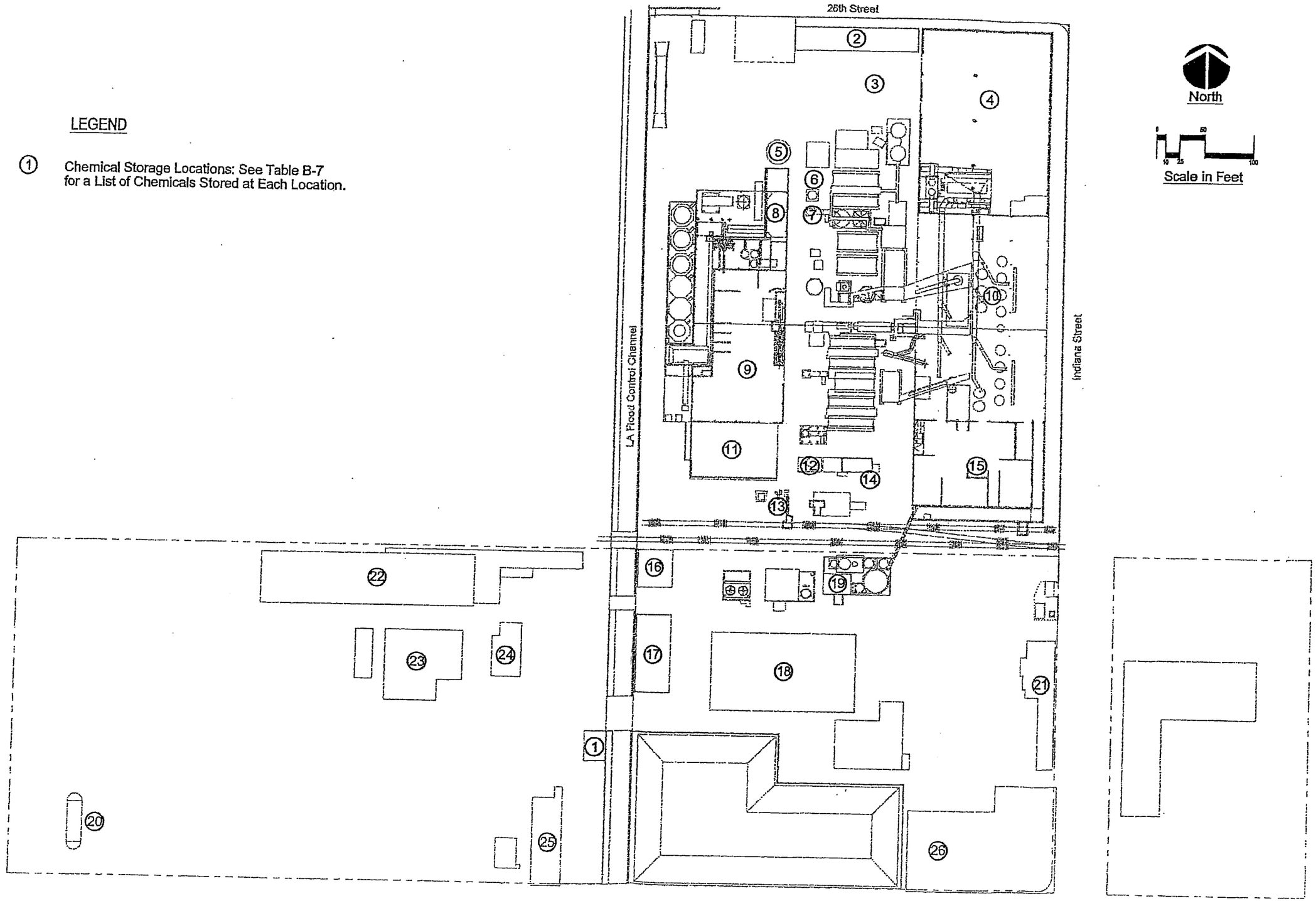
Exide Technologies
Vernon, California

SCALE:	N.T.S.	Figure B–2
PROJECT NUMBER:	2013–2993–01	
DATE:	8/4/14	

F:\Projects\2013\20132993 - Exide Vernon Permitting Assistance\cad\2013-2993-078\2013-2993-01-09.dwg

LEGEND

① Chemical Storage Locations: See Table B-7 for a List of Chemicals Stored at Each Location.



Exide Corporation - Vernon, California

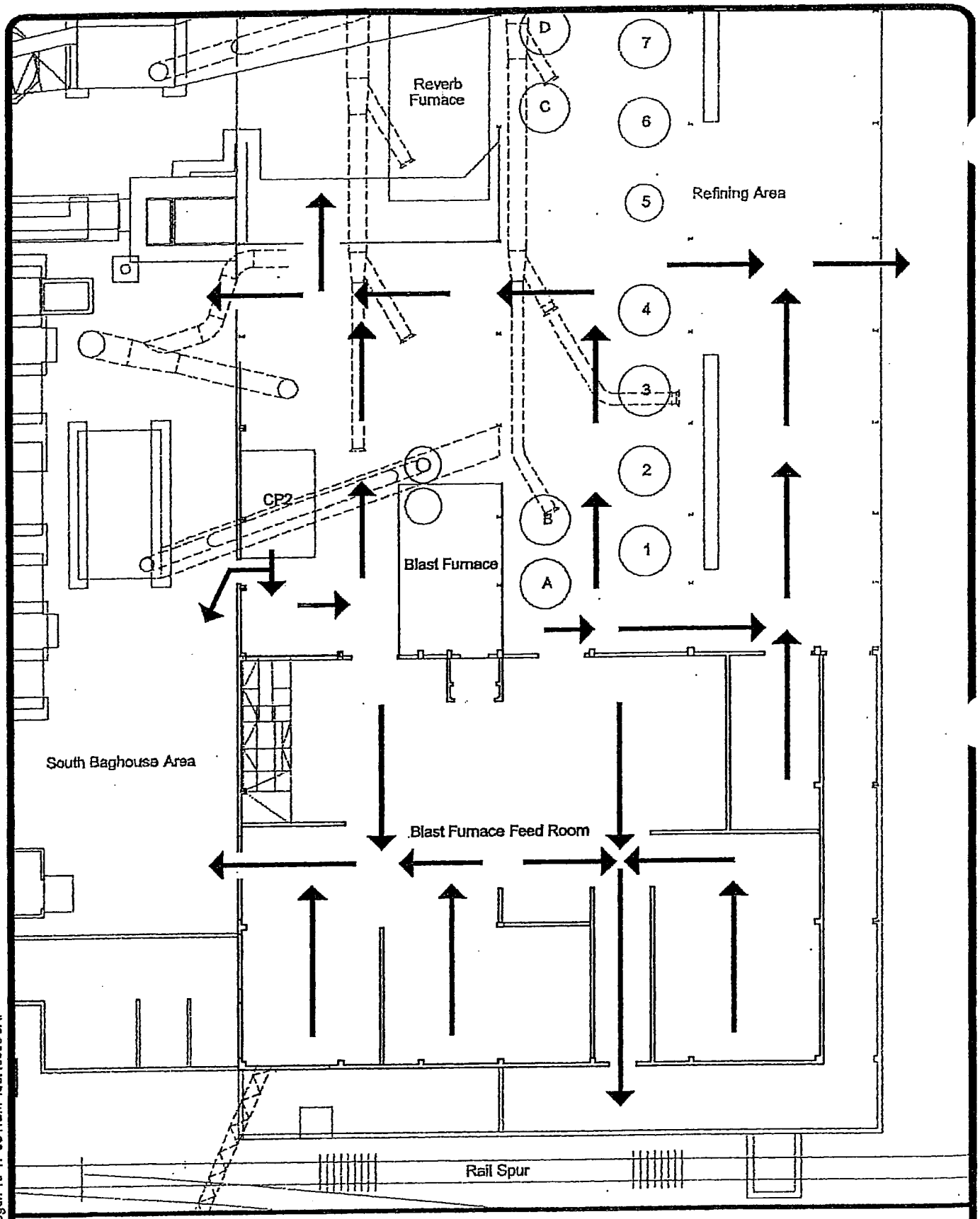
CHEMICAL STORAGE LOCATION PLAN

FIGURE B-3

490-319 1=100 ccl/regan 10-17-00 NBM 460.A0555 JAP Part B 2000

APPENDIX C

EVACUATION ROUTES



Personnel Evacuation Direction For This area

Area Roll Call : Scrubber

Plant Wide Roll Call : Administration Parking Lot

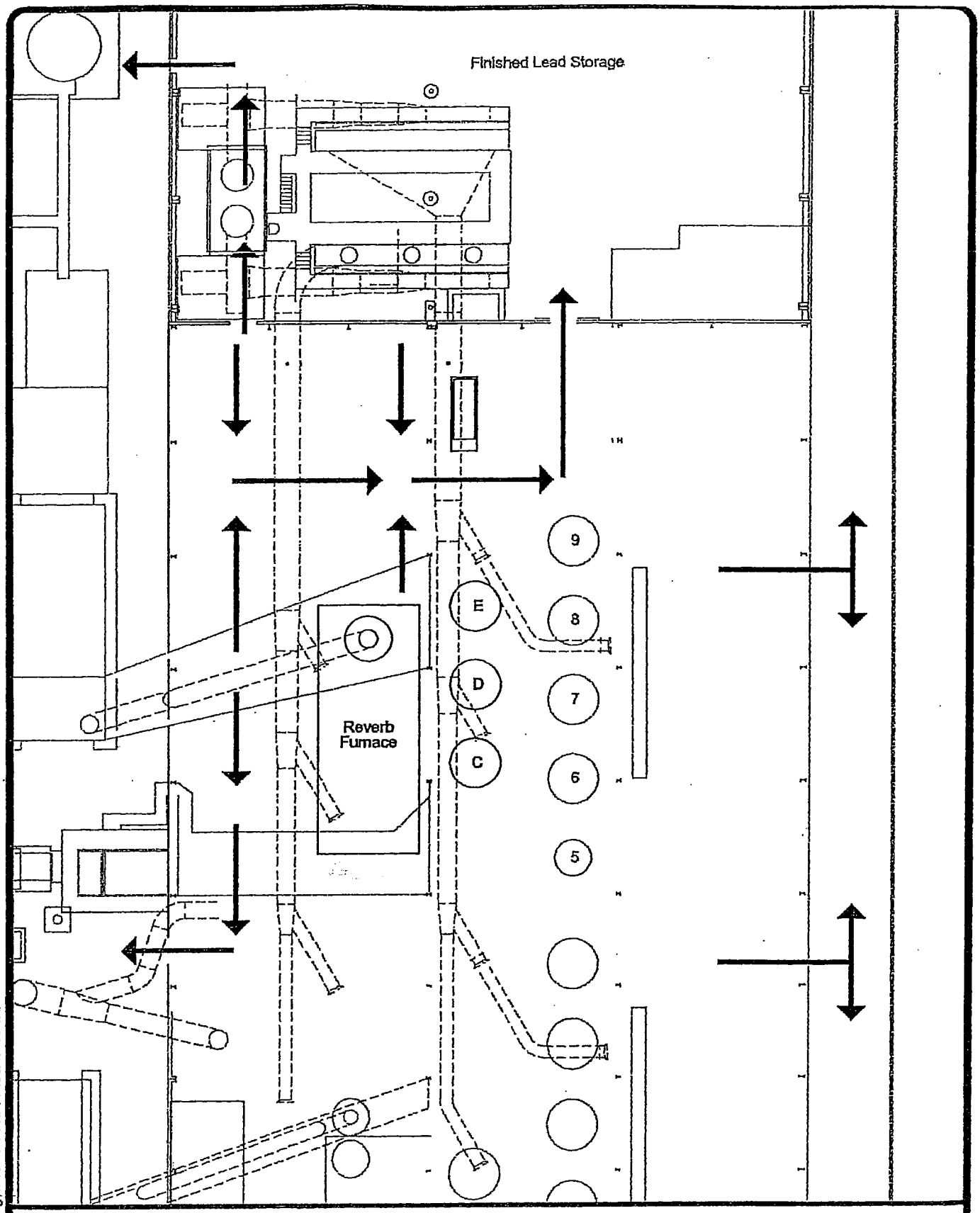
490-312A 1=30 col/regen 10-17-00 NBM 490.40556 JAP

Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES BLAST FURNACE AREA

FIGURE C-1



Personnel Evacuation Direction For This area

Area Roll Call : Scrubber

Plant Wide Roll Call : Administration Parking Lot

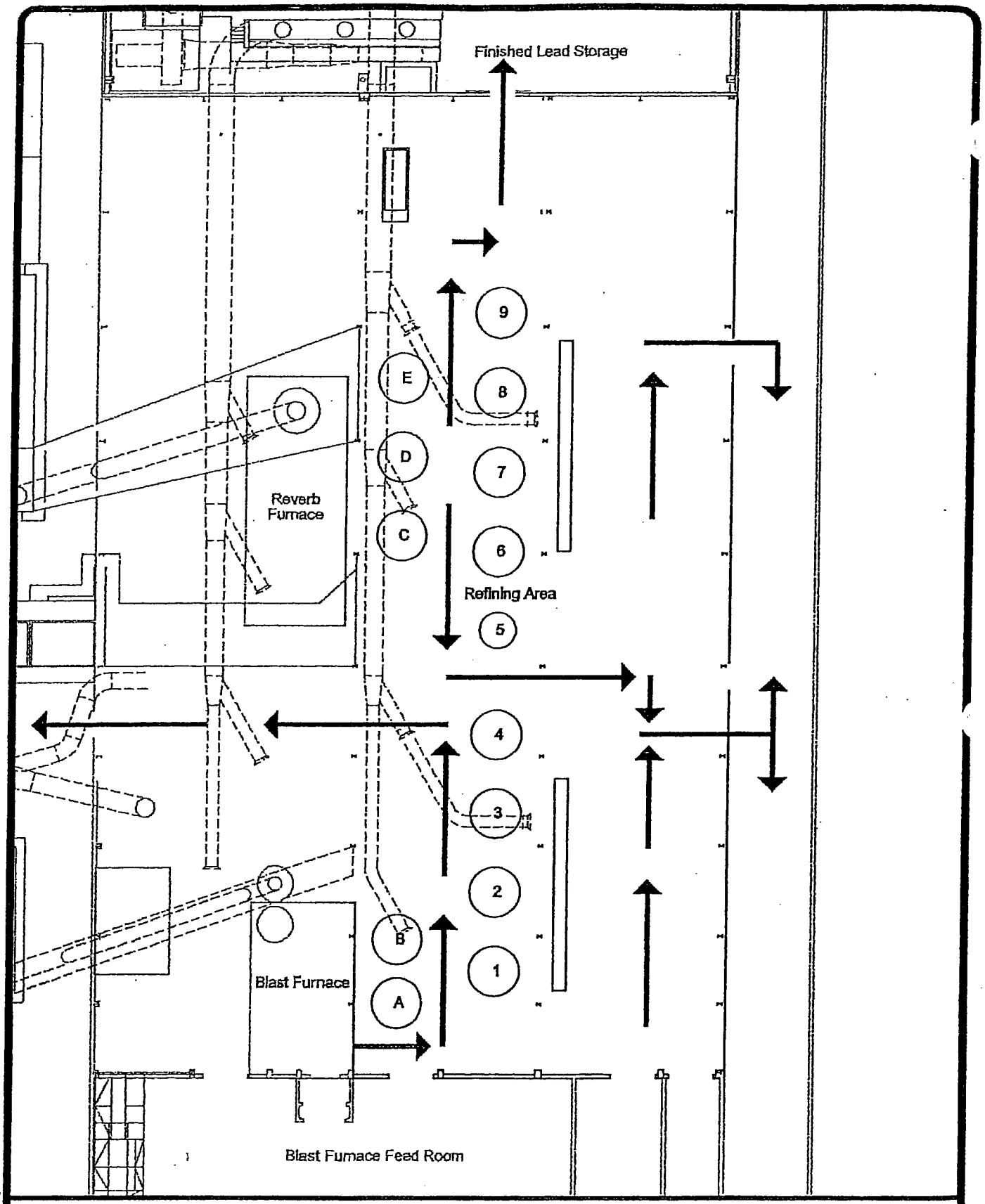
490-312B 1=30 colfregen 10-17-00 NBM 490.40556 JAP

Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES REVERB FURNACE AREA

FIGURE C-2



Personnel Evacuation Direction For This area

Area Roll Call: North Yard

Plant Wide Roll Call: Administration Parking Lot

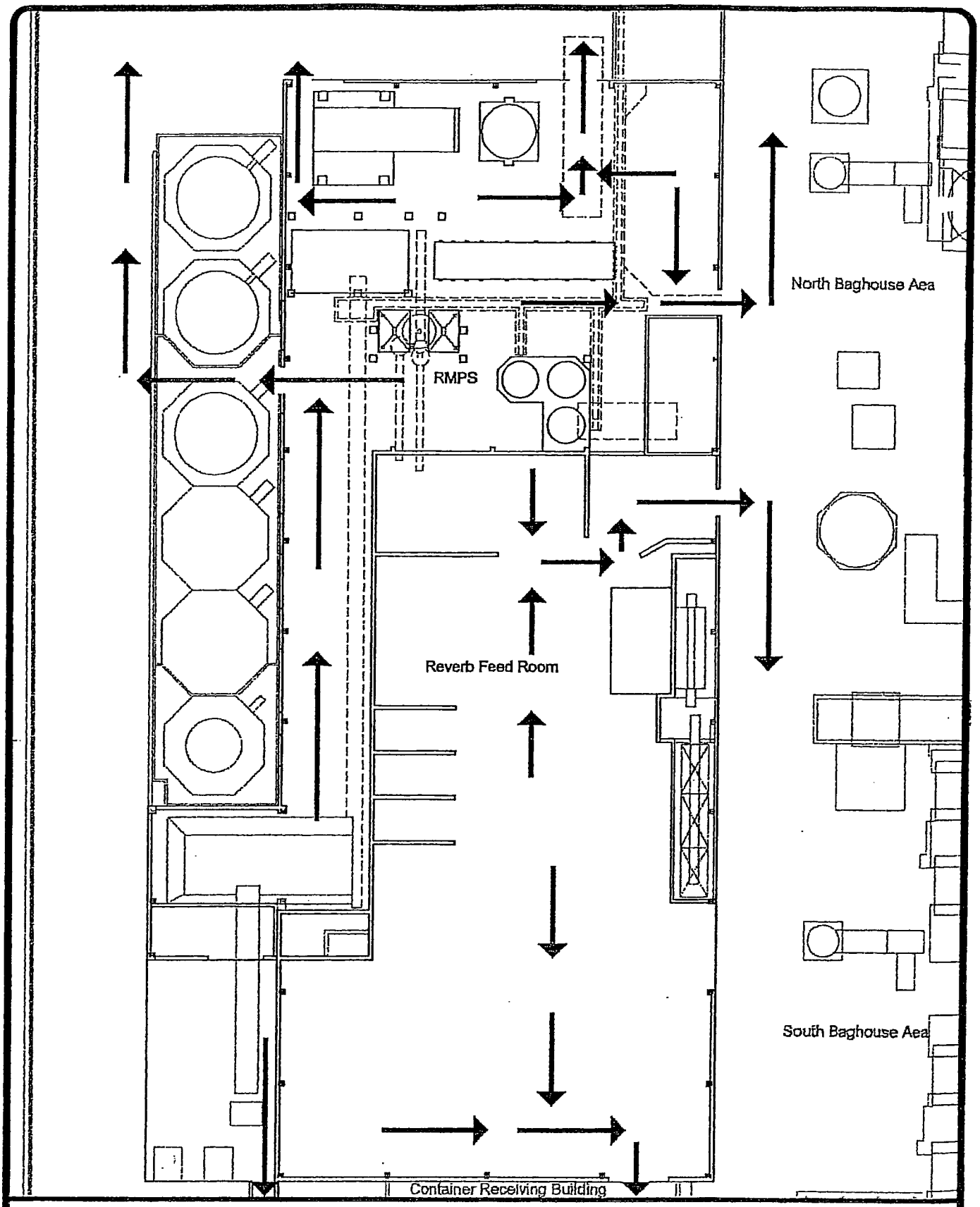
490-312C 1=30 col/regen 10-17-00 NBM 490.40556 JAP

Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES REFINING AREA

FIGURE C-3



Personnel Evacuation Direction For This area

Area Roll Call: North Yard

Plant Wide Roll Call:
Administration Parking Lot

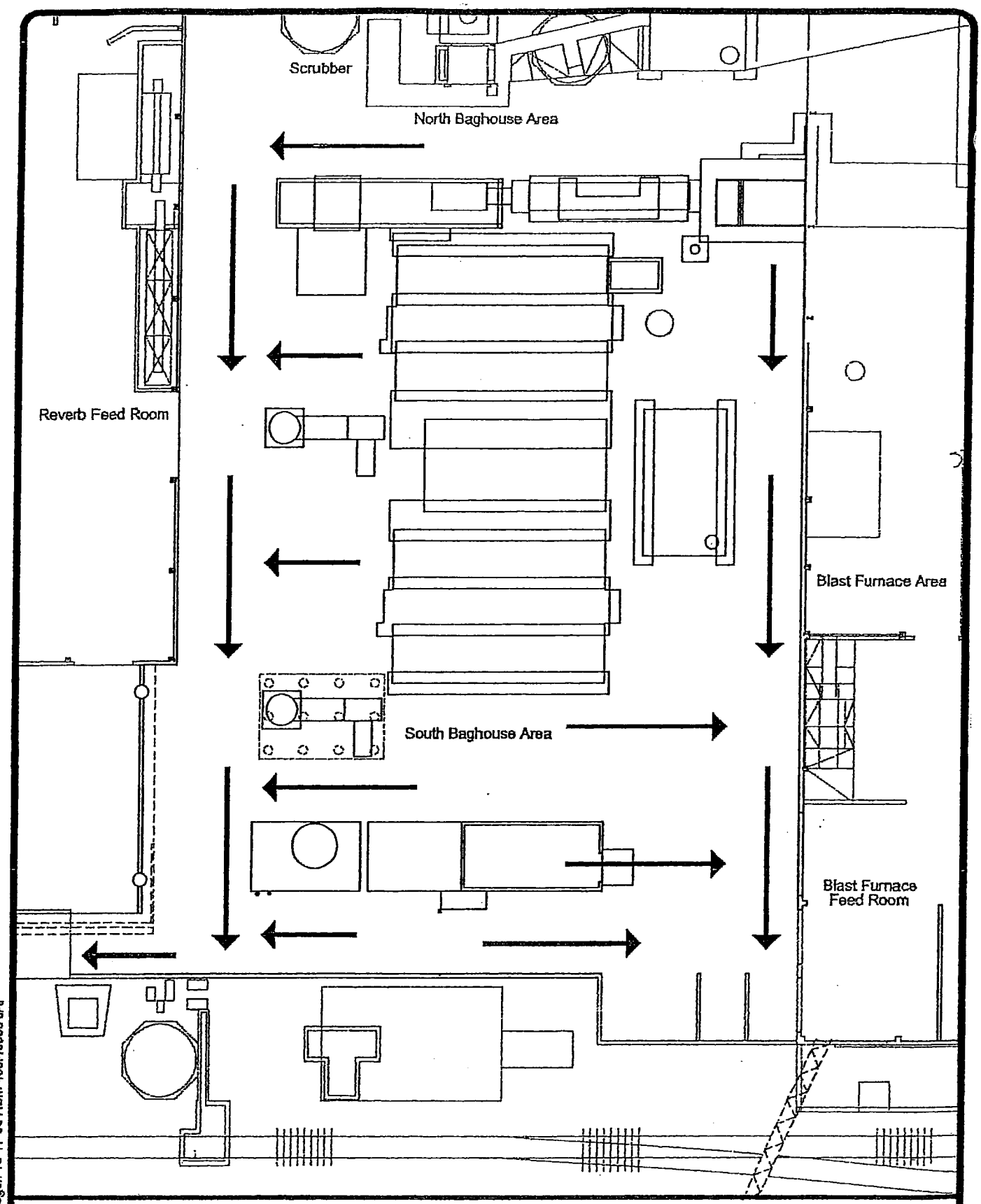
490-312D 1=30 col/regen 10-17-00 NBM 490.40558 JAP

Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES RMPS/REVERB FEED AREAS

FIGURE C-4



Personnel Evacuation Direction For This area

Area Roll Call: North Yard

Plant Wide Roll Call:
Administration Parking Lot

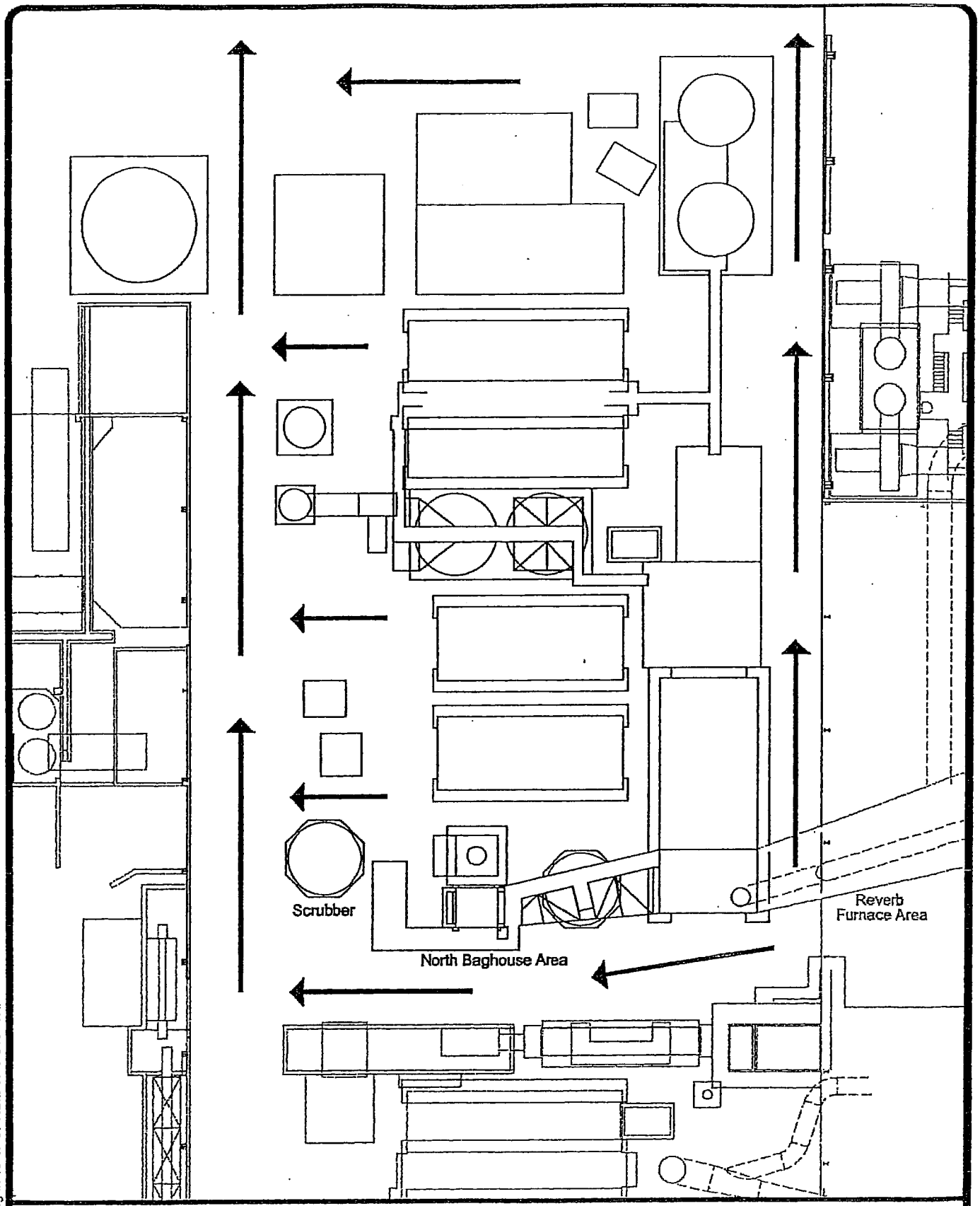
Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES SOUTH BAGHOUSE AREA

FIGURE C-5

490-312E 1=30 colfregen 10-17-00 NBM 490.40556 JAP



Personnel Evacuation Direction For This area

Area Roll Call: North Yard

Plant Wide Roll Call:
Administration Parking Lot

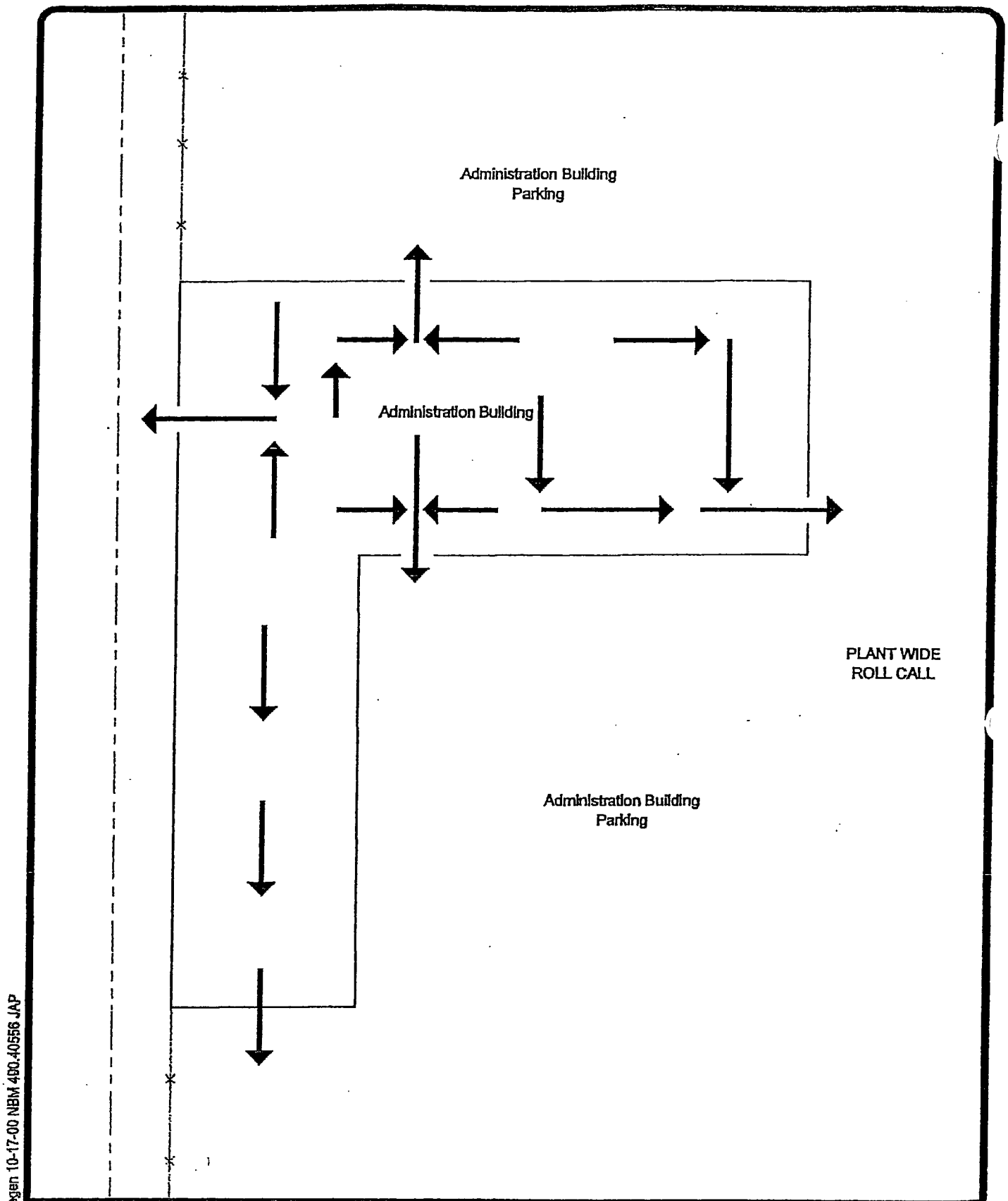
Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES NORTH BAGHOUSE AREA

FIGURE C-6

490-312F 1=30 coll/regen 10-17-00 NBM 490.40556 JAP



Personnel Evacuation Direction For This area

Plant Wide Roll Call:
Administration Parking Lot

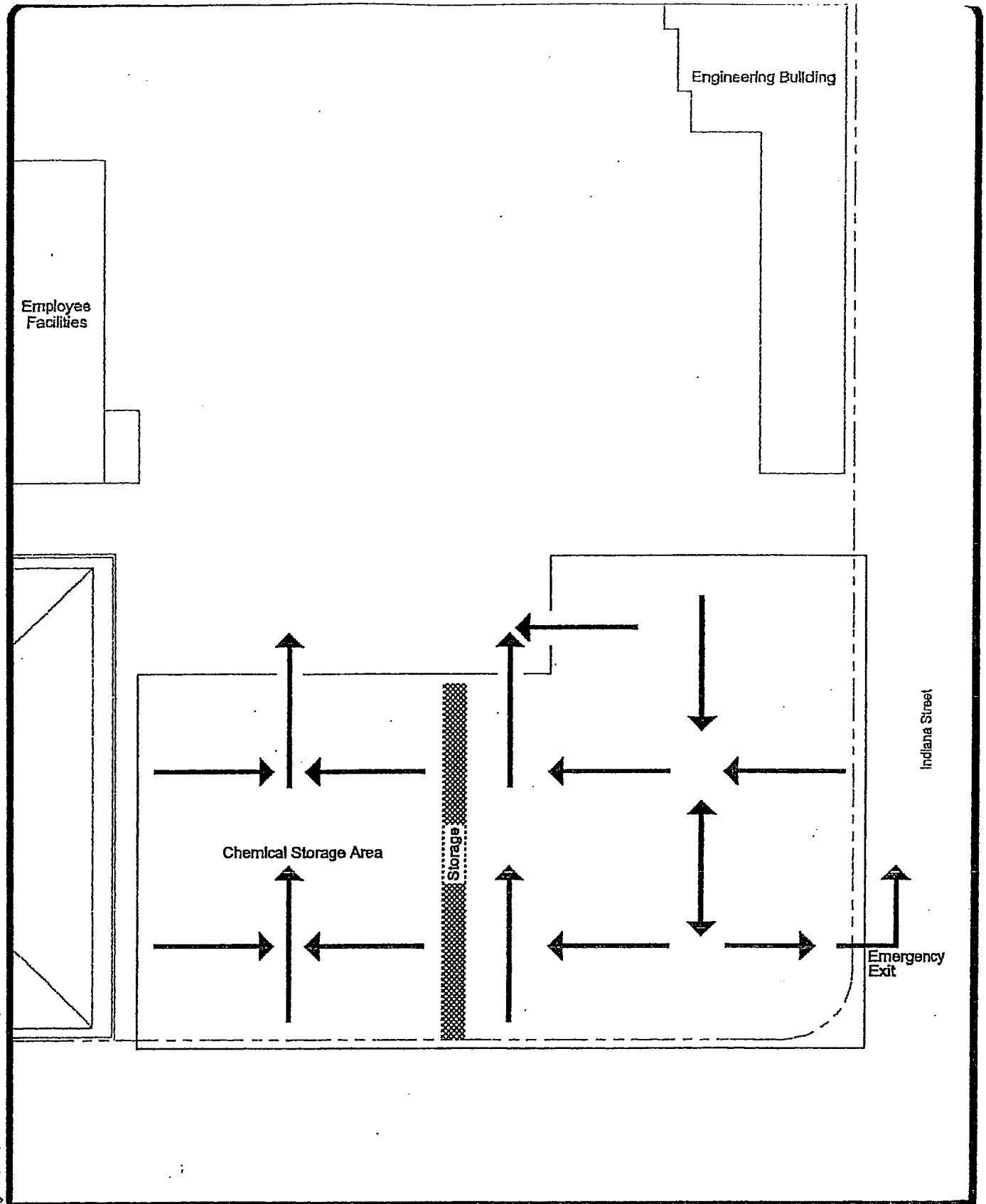
Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES ADMINISTRATION BLDG.

FIGURE C-7

490-312G 1=30 col/regen 10-17-00 NBM 490.40556 JAP



Personnel Evacuation Direction For This area

Area Roll Call:
Road North of Gate

Plant Wide Roll Call:
Administration Parking Lot

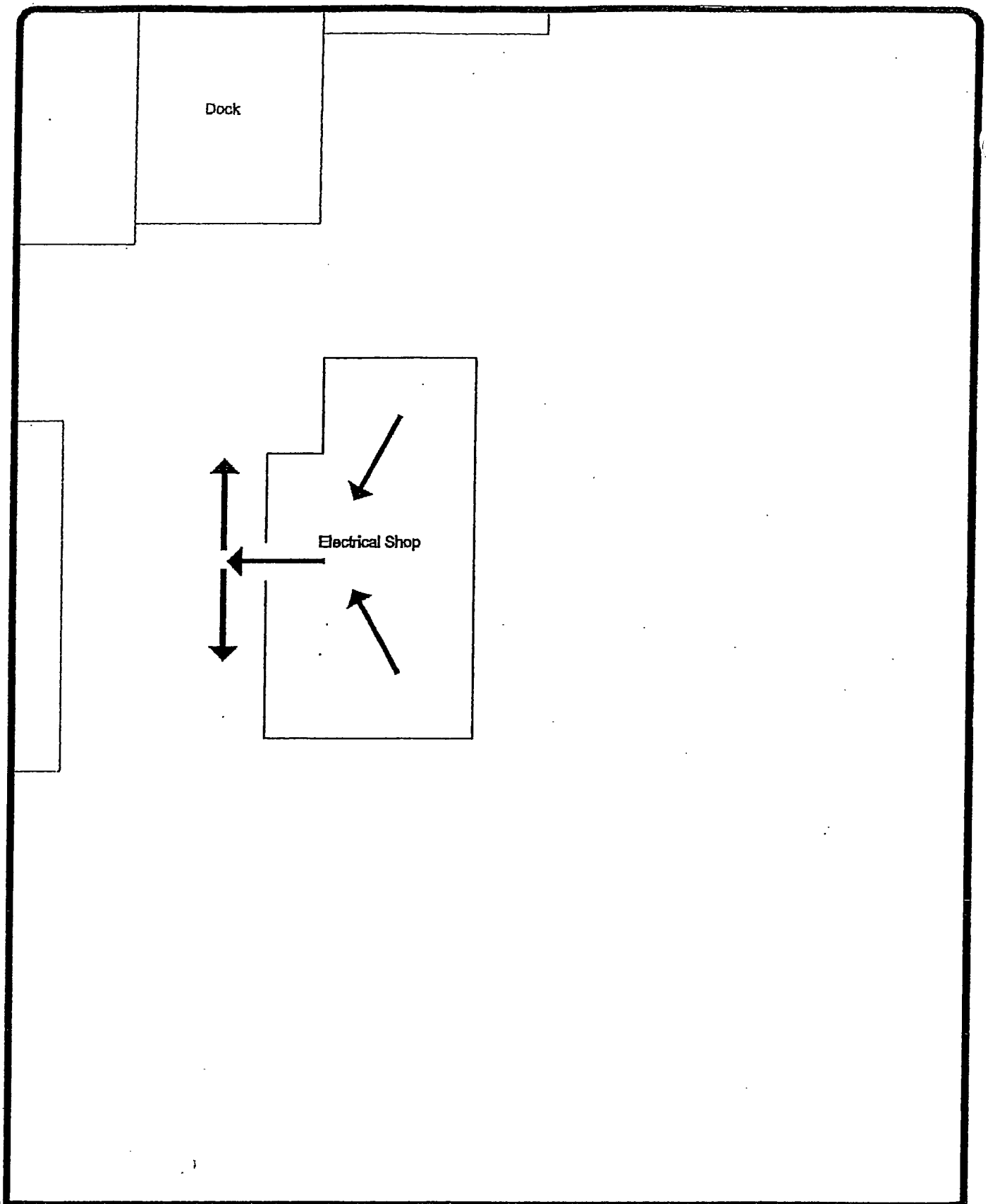
Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES CHEMICAL STORAGE AREA

FIGURE C-8

490-312H 1=30 col/regen 10-17-00 NBM 490.40556 JAP



Personnel Evacuation Direction For This area

Area Roll Call: West Yard

Plant Wide Roll Call:
Administration Parking Lot

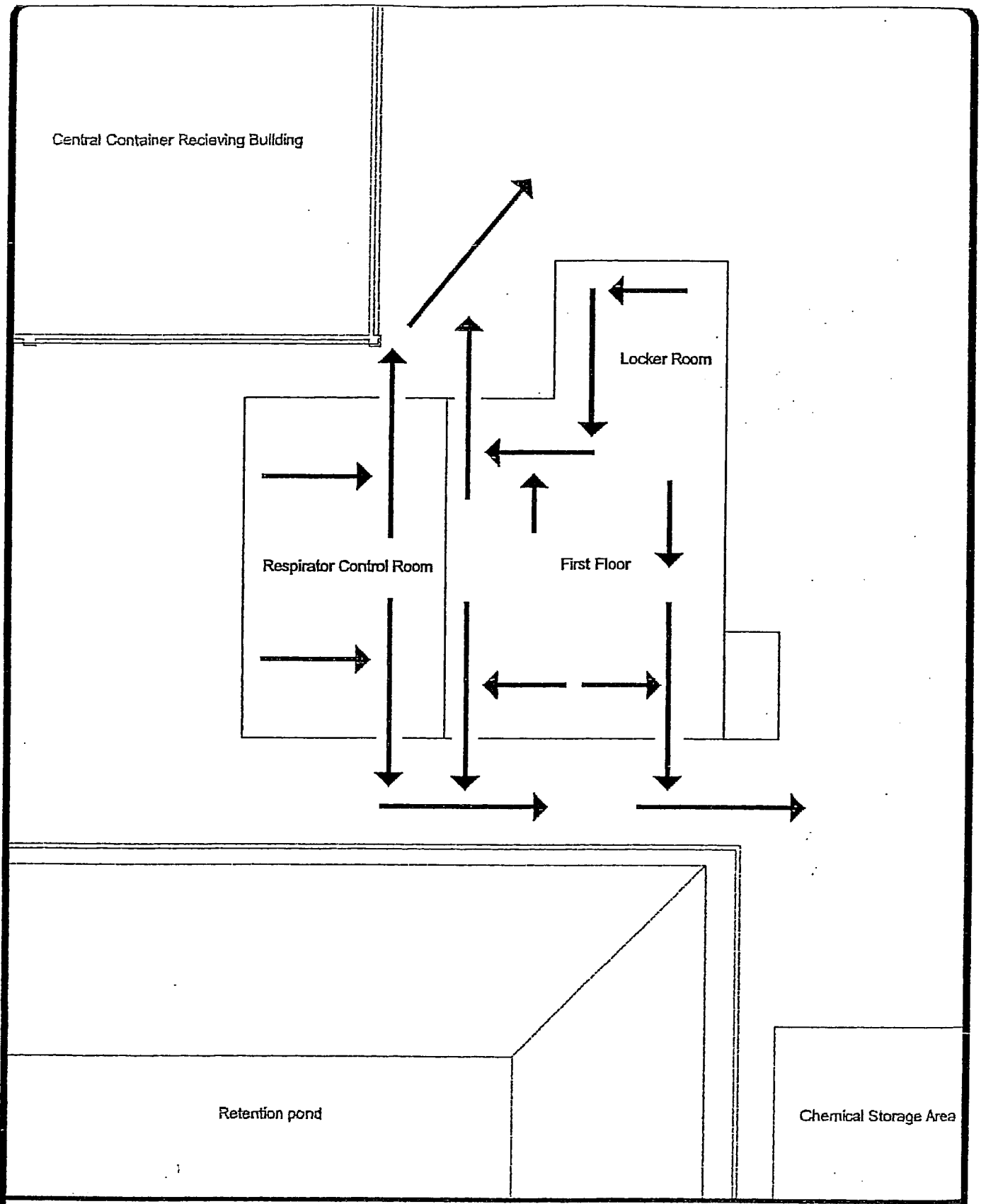
Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES ELECTRICAL SHOP AREA

FIGURE C-9

490-3121 1=30 col/regen 10-17-00 NBM 490.40558 JAP



Personnel Evacuation Direction For This area

Area Roll Call: North of Building

Plant Wide Roll Call:
Administration Parking Lot

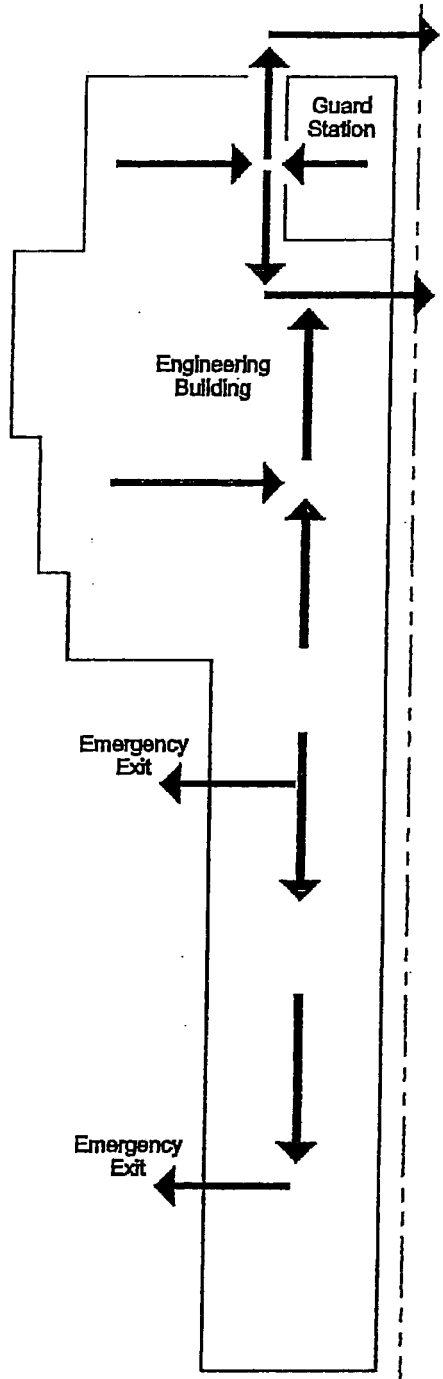
Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES EMPLOYEE FACILITIES AREA

FIGURE C-1(

490-312J 1=30 cd/regen 10-17-00 NBM 490.40556 JAP



Chemical Storage Area

Personnel Evacuation Direction For This area

Area Roll Call At The Scrubber

Plant Wide Roll Call At The Administration Parking Lot

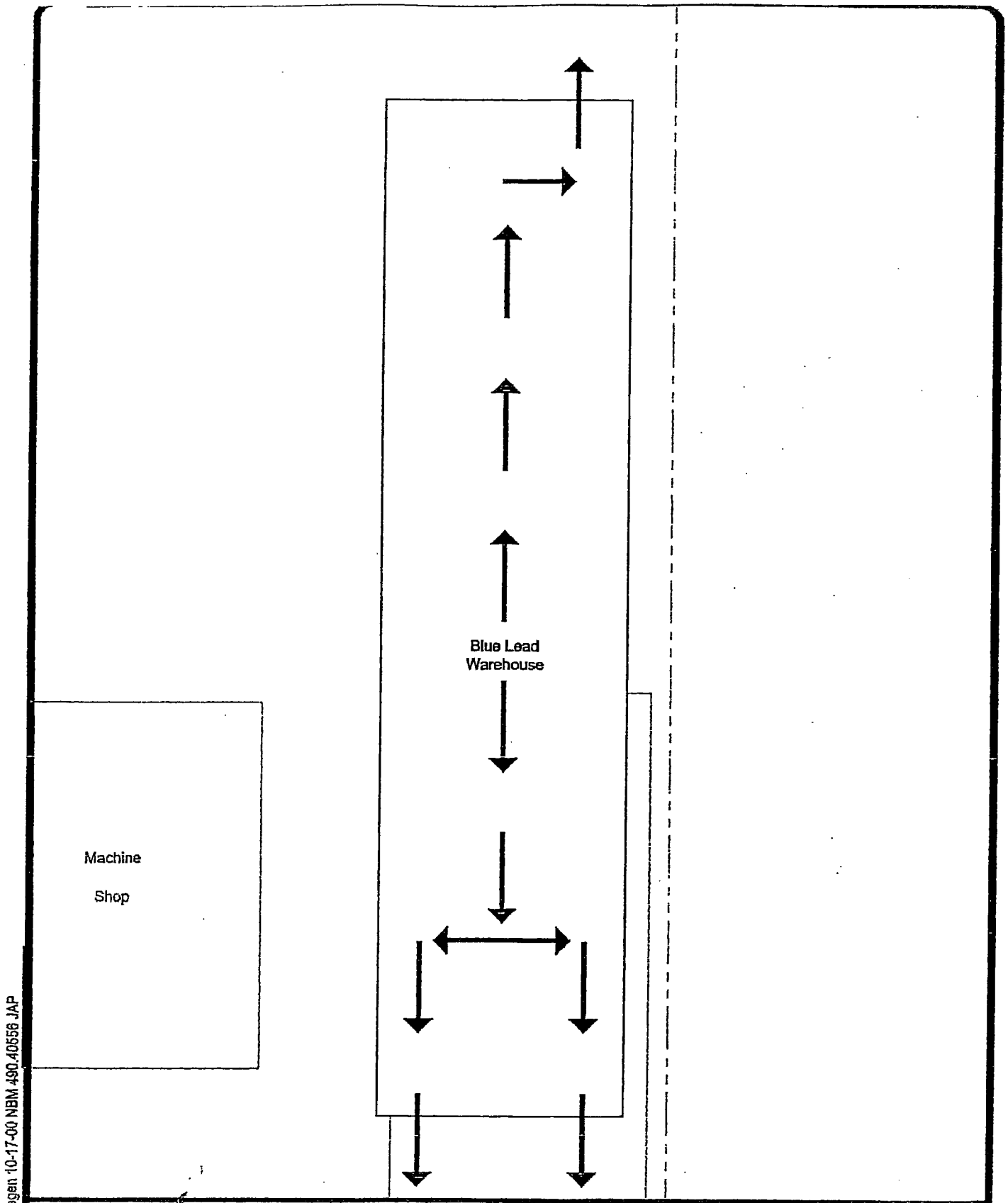
490-3112K 1=30 colnegen 10-17-00 NBM 490.40558 JAP

Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES ENGINEERING BUILDING

FIGURE C-11



Personnel Evacuation Direction For This area

Area Roll Call: West Yard

Plant Wide Roll Call:
Administration Parking Lot

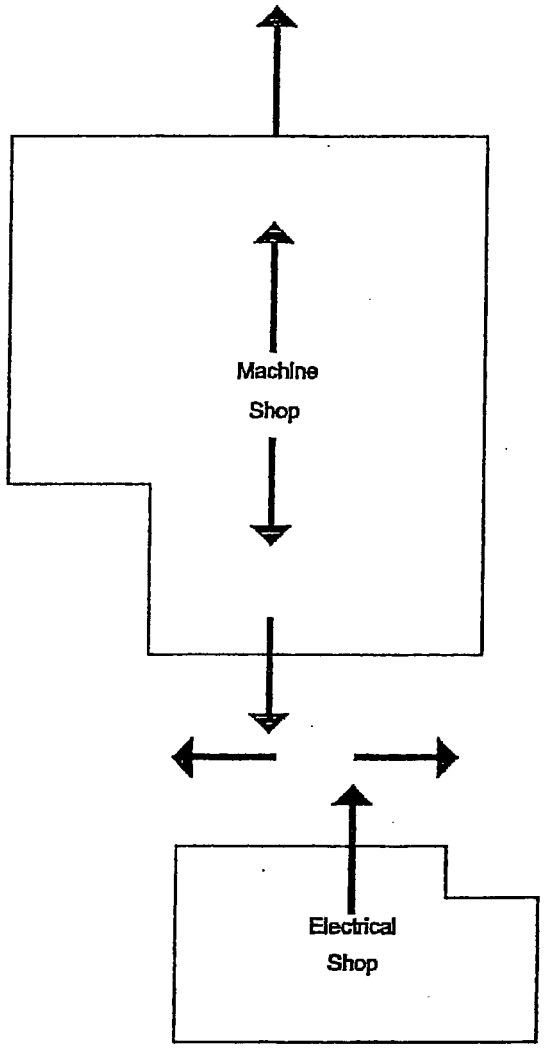
Exide Corporation - Vernon, California

Not
To
Scale

EVACUATION ROUTES
WAREHOUSE AREA

FIGURE C-1

480-312L 1=30 colfregen 10-17-00 NBM 490.40656 JAP



Blue Lead
Warehouse

Dock

Personnel Evacuation Direction For This area

Area Roll Call: North of Building

Plant Wide Roll Call:
Administration Parking Lot

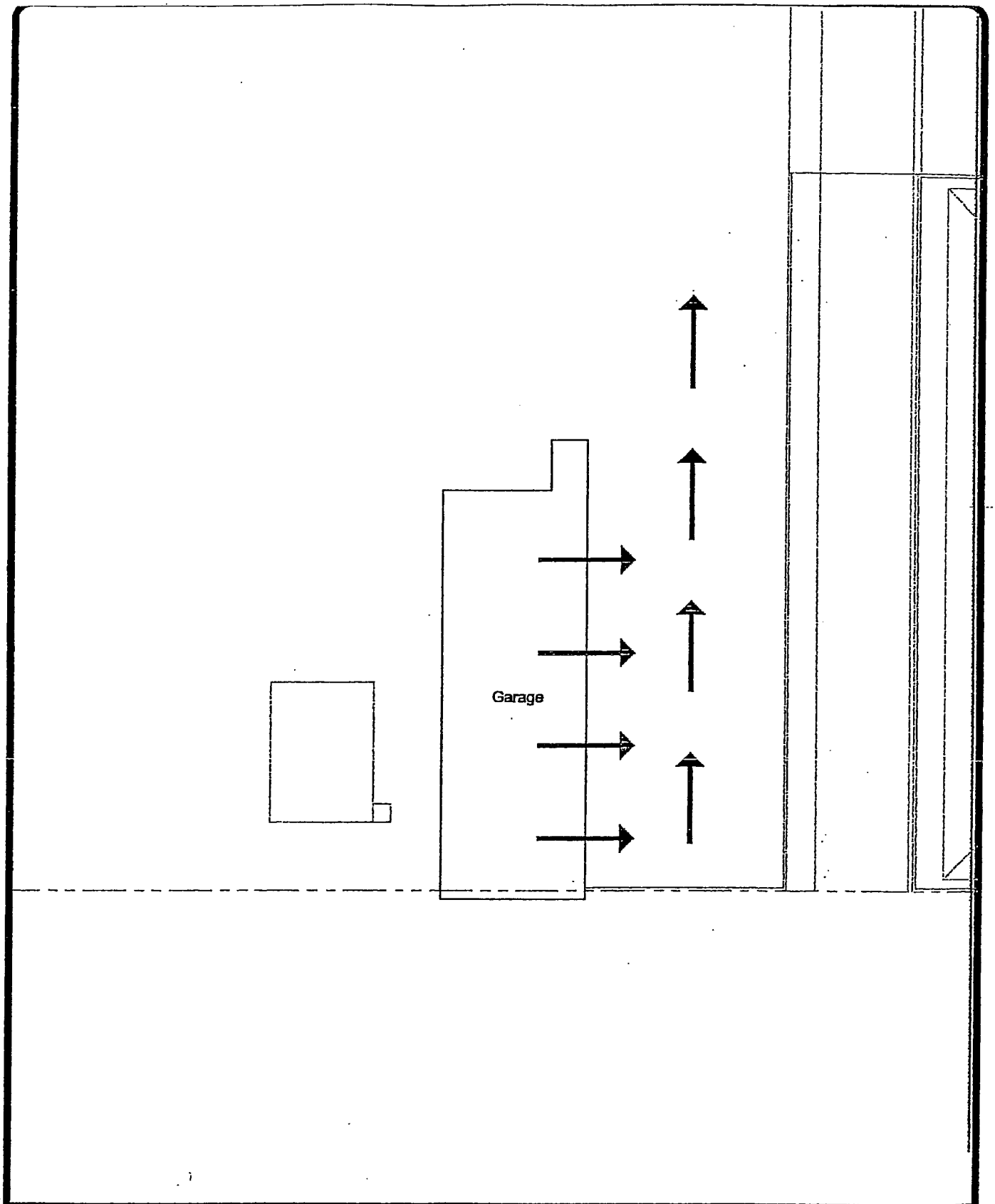
Exide Corporation - Vernon, California

Not
To
Scale

EVACUATION ROUTES
MACHINE SHOP AREA

FIGURE C-13

490-312M 1=30 col/regen 10-17-00 NBM 490.40558 JAP



Personnel Evacuation Direction For This area

Area Roll Call At The Scrubber

Plant Wide Roll Call At The Administration Parking Lot

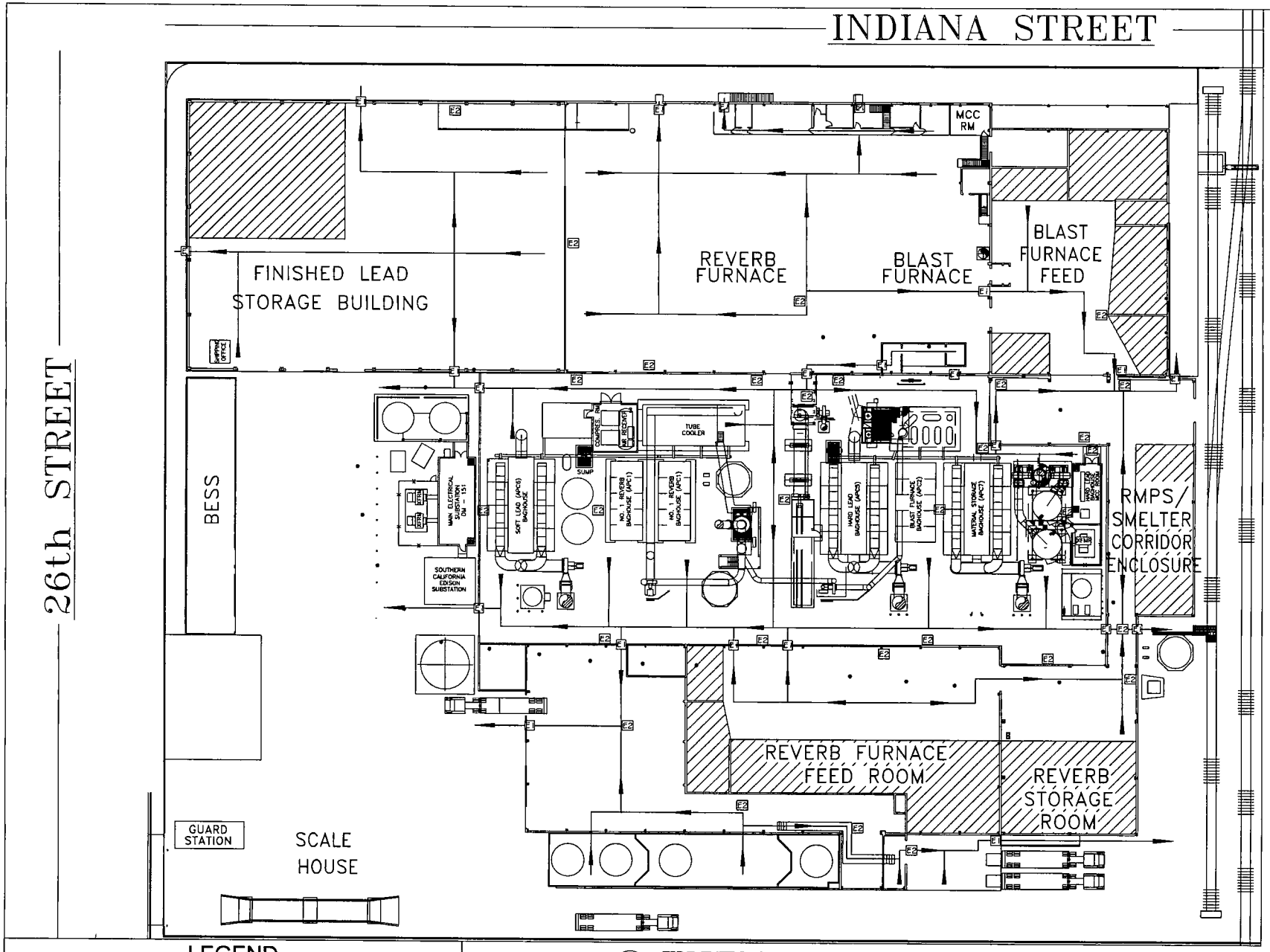
Exide Corporation - Vernon, California

Not To Scale

EVACUATION ROUTES GARAGE AREA

FIGURE C-14

490-312N 1=30 col/regen 10-17-00 NBM 490.40556 JAP



LEGEND	
E1	LUMINOUS EXIT SIGN WITH BATTERY BACKUP
E2	LUMINOUS EXIT DIRECTION SIGN WITH BATTERY BACKUP
	UNOCCUPIED SPACE, USED FOR RAW MATERIAL STORAGE

1 FIRE EXIT PLAN

Scale: 1/32"=1'

NO.	DATE	REVISION	BY	CHK'D	DATE
	7-13-11	MISC CHANGES TO FIRE EXIT PATHS	RBB		

PERMIT APPLICATIONS INFORMATION

AIR			
WATER			
BLDG.			

DRAWING RECORD INFORMATION

DRN. BY Randy Brown II DATE July 13, 2011

SCALE 1/32" = 1'

EXIDE TECHNOLOGIES, Inc. AUTOMOTIVE BATTERY DIVISION ATLANTA, GEORGIA

BAGHOUSE BUILDING - FIRE EXIT PLAN

PROJECT NUMBER	FAC. NO.	DEPT/AREA	DRAWING TYPE	DRAWING NUMBER	REV. NO.
047-2			Fire	F.3.2	1

REGISTERED PROFESSIONAL ENGINEER RONALD R. BLAKE No. C43885 Exp. 30/13 CIVIL STATE OF CALIFORNIA

APPENDIX D

MSDS LIST and OSHA HEALTH & SAFETY INFORMATION FOR LEAD

MSDS LIST

Material Safety Data Sheets are maintained onsite (bound under a separate cover) for the following chemicals:

Paint Thinner
High Temperature Paint
Inswool Blanket
Antimony
Arsenic
Battery expander
Calcium
Ferric Chloride
Hydrogen Peroxide, 35-40%
Red Heavy Duty Kleensweep
Absolyte IIP V-0 Valve Regulated Lead Acid Battery
Absolyte IIP, Champion, and Element Valve Regulated Lead Acid Battery
Lead-Acid Battery
Valve regulated lead acid absorbed glass mat blocs
Marathon V-0 and Sprinter V-0 Valve Regulated Lead Acid Battery
Marathon and Sprinter Valve Regulated Lead Acid Battery
Lead Oxide
Red Lead Oxide
Narmag 60DB
Nucon 60
Potassium Nitrate
Rescal 70D
Selenium
Sodium Carbonate
Sodium Hydroxide
Sodium Sulfate
Tin
West C-124
West W-126

OSHA Regulations

Substance Data Sheet for Occupational Exposure to Lead

Standard Number:	29 CFR 1910.1025 Appendix A Cal/OSHA 5216 Appendix A
Standard Title:	Substance data sheet for occupational exposure to lead
SubPart Number:	Z
SubPart Title:	Toxic and Hazardous Substances

I. SUBSTANCE IDENTIFICATION

A. Substance:

Pure lead (Pb) is a heavy metal at room temperature and pressure and is a basic chemical element. It can combine with various other substances to form numerous lead compounds.

B. Compounds Covered by the Standard:

The word "lead" when used in this standard means elemental lead, all inorganic lead compounds and a class of organic lead compounds called lead soaps. This standard does not apply to other organic lead compounds.

C. Uses:

Exposure to lead occurs in at least 120 different occupations, including primary and secondary lead smelting, lead storage battery manufacturing, lead pigment manufacturing and use, solder manufacturing and use, shipbuilding and ship repairing, auto manufacturing, and printing.

D. Permissible Exposure:

The Permissible Exposure Limit (PEL) set by the standard is 50 micrograms of lead per cubic meter of air (50 ug/m(3)), averaged over an 8-hour workday.

E. Action Level:

The standard establishes an action level of 30 micrograms per cubic meter of air (30 ug/m(3)), time weighted average, based on an 8-hour work-day. The action level initiates several requirements of the standard, such as exposure monitoring, medical surveillance, and training and education.

II. HEALTH HAZARD DATA

A. Ways in which lead enters your body.

When absorbed into your body in certain doses lead is a toxic substance. The object of the lead standard is to prevent absorption of harmful quantities of lead. The standard is intended to protect you not only from the immediate toxic effects of lead, but also from

the serious toxic effects that may not become apparent until years of exposure have passed.

Lead can be absorbed into your body by inhalation (breathing) and ingestion (eating). Lead (except for certain organic lead compounds not covered by the standard, such as tetraethyl lead) is not absorbed through your skin. When lead is scattered in the air as a dust, fume or mist it can be inhaled and absorbed through you lungs and upper respiratory tract. Inhalation of airborne lead is generally the most important source of occupational lead absorption. You can also absorb lead through your digestive system if lead gets into your mouth and is swallowed. If you handle food, cigarettes, chewing tobacco, or make-up which have lead on them or handle them with hands contaminated with lead, this will contribute to ingestion.

A significant portion of the lead that you inhale or ingest gets into your blood stream. Once in your blood stream, lead is circulated throughout your body and stored in various organs and body tissues. Some of this lead is quickly filtered out of your body and excreted, but some remains in the blood and other tissues. As exposure to lead continues, the amount stored in your body will increase if you are absorbing more lead than your body is excreting. Even though you may not be aware of any immediate symptoms of disease, this lead stored in your tissues can be slowly causing irreversible damage, first to individual cells, then to your organs and whole body systems.

B. Effects of overexposure to lead

(1) Short term (acute) overexposure.

Lead is a potent, systemic poison that serves no known useful function once absorbed by your body. Taken in large enough doses, lead can kill you in a matter of days. A condition affecting the brain called acute encephalopathy may arise which develops quickly to seizures, coma, and death from cardiorespiratory arrest. A short term dose of lead can lead to acute encephalopathy. Short term occupational exposures of this magnitude are highly unusual, but not impossible. Similar forms of encephalopathy may, however, arise from extended, chronic exposure to lower doses of lead. There is no sharp dividing line between rapidly developing acute effects of lead, and chronic effects which take longer to acquire. Lead adversely affects numerous body systems, and causes forms of health impairment and disease which arise after periods of exposure as short as days or as long as several years.

(2) Long-term (chronic) overexposure.

Chronic overexposure to lead may result in severe damage to your blood-forming, nervous, urinary and reproductive systems. Some common symptoms of chronic overexposure include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint pain or soreness, fine tremors, numbness, dizziness, hyperactivity and colic. In lead colic there may be severe abdominal pain.

Damage to the central nervous system in general and the brain (encephalopathy) in particular is one of the most severe forms of lead poisoning. The most severe, often fatal, form of encephalopathy may be preceded by vomiting, a feeling of dullness progressing to drowsiness and stupor, poor memory, restlessness, irritability, tremor, and convulsions. It may arise suddenly with the onset of seizures, followed by coma, and death. There is a tendency for muscular weakness to develop at the same time. This weakness may progress to paralysis often observed as a characteristic "wrist drop" or "foot drop" and is a manifestation of a disease to the nervous system called peripheral neuropathy.

Chronic overexposure to lead also results in kidney disease with few, if any, symptoms appearing until extensive and most likely permanent kidney damage has occurred. Routine laboratory tests reveal the presence of this kidney disease only after about two-thirds of kidney function is lost. When overt symptoms of urinary dysfunction arise, it is often too late to correct or prevent worsening conditions, and progression to kidney dialysis or death is possible.

Chronic overexposure to lead impairs the reproductive systems of both men and women. Overexposure to lead may result in decreased sex drive, impotence and sterility in men. Lead can alter the structure of sperm cells raising the risk of birth defects. There is evidence of miscarriage and stillbirth in women whose husbands were exposed to lead or who were exposed to lead themselves. Lead exposure also may result in decreased fertility, and abnormal menstrual cycles in women. The course of pregnancy may be adversely affected by exposure to lead since lead crosses the placental barrier and poses risks to developing fetuses. Children born of parents either one of whom were exposed to excess lead levels are more likely to have birth defects, mental retardation, behavioral disorders or die during the first year of childhood.

Overexposure to lead also disrupts the blood-forming system resulting in decreased hemoglobin (the substance in the blood that carries oxygen to the cells) and ultimately anemia. Anemia is characterized by weakness, pallor and fatigability as a result of decreased oxygen carrying capacity in the blood.

(3) Health protection goals of the standard.

Prevention of adverse health effects for most workers from exposure to lead throughout a working lifetime requires that worker blood lead (PbB) levels be maintained at or below forty micrograms per one hundred grams of whole blood (40 ug/100g). The blood lead levels of workers (both male and female workers) who intend to have children should be maintained below 30 ug/100g to minimize adverse reproductive health effects to the parents and to the developing fetus.

The measurement of your blood lead level is the most useful indicator of the amount of lead being absorbed by your body. Blood lead levels (PbB) are most often reported in units of milligrams (mg) or micrograms (ug) of lead (1 mg=1000 ug) per 100 grams (100g), 100 milliliters (100 ml) or deciliter (dl) of blood. These three units are

essentially the same. Sometimes PbB's are expressed in the form of mg% or ug%. This is a shorthand notation for mg Pb or ug Pb per 100g, 100 ml, or dl.

PbB measurements show the amount of lead circulating in your blood stream, but do not give any information about the amount of lead stored in your various tissues. PbB measurements merely show current absorption of lead, not the effect that lead is having on your body or the effects that past lead exposure may have already caused. Past research into lead-related diseases, however, has focused heavily on associations between PbBs and various diseases. As a result, your PbB is an important indicator of the likelihood that you will gradually acquire a lead-related health impairment or disease.

Once your blood lead level climbs above 40 ug/100g, your risk of disease increases. There is a wide variability of individual response to lead, thus it is difficult to say that a particular PbB in a given person will cause a particular effect. Studies have associated fatal encephalopathy with PbBs as low as 150 ug/100g. Other studies have shown other forms of diseases in some workers with PbBs well below 80 ug/100g. Your PbB is a crucial indicator of the risks to your health, but one other factor is also extremely important. This factor is the length of time you have had elevated PbBs. The longer you have an elevated PbB, the greater the risk that large quantities of lead are being gradually stored in your organs and tissues (body burden). The greater your overall body burden, the greater the chances of substantial permanent damage.

The best way to prevent all forms of lead-related impairments and diseases-both short term and long term- is to maintain your PbB below 40 ug/100g. The provisions of the standard are designed with this end in mind. Your employer has prime responsibility to assure that the provisions of the standard are complied with both by the company and by individual workers. You as a worker, however, also have a responsibility to assist your employer in complying with the standard. You can play a key role in protecting your own health by learning about the lead hazards and their control, learning what the standard requires, following the standard where it governs your own actions, and seeing that your employer complies with provisions governing his actions.

(4) Reporting signs and symptoms of health problems.

You should immediately notify your employer if you develop signs or symptoms associated with lead poisoning or if you desire medical advice concerning the effects of current or past exposure to lead on your ability to have a healthy child. You should also notify your employer if you have difficulty breathing during a respirator fit test or while wearing a respirator. In each of these cases your employer must make available to you appropriate medical examinations or consultations. These must be provided at no cost to you and at a reasonable time and place.

The standard contains a procedure whereby you can obtain a second opinion by a physician of your choice if the employer selected the initial physician.

OSHA Regulations

Lead Standards Summary for Employees

Standard Number:	1910.1025 Appendix B; Cal/OSHA Section 5216
Standard Title:	Employee standard summary
SubPart Number:	Z
SubPart Title:	Toxic and Hazardous Substances

This appendix summarizes key provisions of the standard that you as a worker should become familiar with.

I. PERMISSIBLE EXPOSURE LIMIT (PEL) - PARAGRAPH (C)

The standards sets a permissible exposure limit (PEL) of fifty micrograms of lead per cubic meter of air (50 ug/m(3)), averaged over an 8-hour work-day. This is the highest level of lead in air to which you may be permissibly exposed over an 8-hour workday. Since it is an 8-hour average it permits short exposures above the PEL so long as for each 8-hour work day your average exposure does not exceed the PEL.

This standard recognizes that your daily exposure to lead can extend beyond a typical 8-hour workday as the result of overtime or other alterations in your work schedule. To deal with this, the standard contains a formula which reduces your permissible exposure when you are exposed more than 8 hours. For example, if you are exposed to lead for 10 hours a day, the maximum permitted average exposure would be 40 ug/m(3).

II. EXPOSURE MONITORING - PARAGRAPH (D)

If lead is present in the workplace where you work in any quantity, your employer is required to make an initial determination of whether the action level is exceeded for any employee. This initial determination must include instrument monitoring of the air for the presence of lead and must cover the exposure of a representative number of employees who are reasonably believed to have the highest exposure levels. If your employer has conducted appropriate air sampling for lead in the past year he may use these results. If there have been any employee complaints of symptoms which may be attributable to exposure to lead or if there is any other information or observations which would indicate employee exposure to lead, this must also be considered as part of the initial determination. This initial determination must have been completed by March 31, 1979. If this initial determination shows that a reasonable possibility exists that any employee may be exposed, without regard to respirators, over the action level (30 ug/m(3)) your employer must set up an air monitoring program to determine the exposure level of every employee exposed to lead at your workplace.

In carrying out this air monitoring program, your employer is not required to monitor the exposure of every employee, but he must monitor a representative number of employees and job types. Enough sampling must be done to enable each employee's exposure level to be reasonably represented by at least one full shift (at least 7 hours) air sample. In addition, these air samples must be taken under conditions which represent each employee's regular, daily exposure to lead. All initial exposure monitoring must have been completed by May 30, 1979.

If you are exposed to lead and air sampling is performed, your employer is required to quickly notify you in writing of air monitoring results which represent your exposure. If the results indicate your exposure exceeds the PEL (without regard to your use of respirators), then your employer must also notify you of this in writing, and provide you with a description of the corrective action that will be taken to reduce your exposure.

Your exposure must be rechecked by monitoring every six months if your exposure is over the action level but below the PEL. Air monitoring must be repeated every 3 months if you are exposed over the PEL. Your employer may discontinue monitoring for you if 2 consecutive measurements, taken at least two weeks apart, are below the action level. However, whenever there is a production, process, control, or personnel change at your workplace which may result in new or additional exposure to lead, or whenever there is any other reason to suspect a change which may result in new or additional exposure to lead, your employer must perform additional monitoring.

III. METHODS OF COMPLIANCE - PARAGRAPH (E)

Your employer is required to assure that no employee is exposed to lead in excess of the PEL. The standard establishes a priority of methods to be used to meet the PEL.

IV. RESPIRATORY PROTECTION - PARAGRAPH (F)

Your employer is required to provide and assure your use of respirators when your exposure to lead is not controlled below the PEL by other means. The employer must pay the cost of the respirator. Whenever you request one, your employer is also required to provide you a respirator even if your air exposure level does not exceed the PEL. You might desire a respirator when, for example, you have received medical advice that your lead absorption should be decreased. Or, you may intend to have children in the near future, and want to reduce the level of lead in your body to minimize adverse reproductive effects. While respirators are the least satisfactory means of controlling your exposure, they are capable of providing significant protection if properly chosen, fitted, worn, cleaned, maintained, and replaced when they stop providing adequate protection.

Your employer is required to select respirators from the seven types listed in Table II of the Respiratory Protection section of the standard (Sec. 1910.1025(f)). Any respirator chosen must be approved by the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 42 CFR part 84. This respirator selection table will enable your employer to choose a type of respirator that will give you a proper amount of protection based on your airborne lead exposure. Your employer may select a type of respirator that provides greater protection than that required by the standard; that is, one recommended for a higher concentration of lead than is present in your workplace. For example, a powered air-purifying respirator (PAPR) is much more protective than a typical negative pressure respirator, and may also be more comfortable to wear. A PAPR has a filter, cartridge, or canister to clean the air, and a power source that continuously blows filtered air into your breathing zone. Your employer might make a PAPR available to you to ease the burden of having to wear a respirator for long periods of time. The standard provides that you can obtain a PAPR upon request.

Your employer must also start a Respiratory Protection Program. This program must include written procedures for the proper selection, use, cleaning, storage, and maintenance of respirators.

Your employer must ensure that your respirator facepiece fits properly. Proper fit of a respirator facepiece is critical to your protection from airborne lead. Obtaining a proper fit on each employee may require your employer to make available several different types of respirator masks. To ensure that your respirator fits properly and that facepiece leakage is minimal, your employer must give you either a qualitative or quantitative fit test as specified in Appendix A of the Respiratory Protection standard located at 29 CFR 1910.134.

You must also receive from your employer proper training in the use of respirators. Your employer is required to teach you how to wear a respirator, to know why it is needed, and to understand its limitations.

The standard provides that if your respirator uses filter elements, you must be given an opportunity to change the filter elements whenever an increase in breathing resistance is detected. You also must be permitted to periodically leave your work area to wash your face and respirator facepiece whenever necessary to prevent skin irritation. If you ever have difficulty in breathing during a fit test or while using a respirator, your employer must make a medical examination available to you to determine whether you can safely wear a respirator. The result of this examination may be to give you a positive pressure respirator (which reduces breathing resistance) or to provide alternative means of protection.

V. PROTECTIVE WORK CLOTHING AND EQUIPMENT - PARAGRAPH (G)

If you are exposed to lead above the PEL, or if you are exposed to lead compounds such as lead arsenate or lead azide which can cause skin and eye irritation, your employer must provide you with protective work clothing and equipment appropriate for the hazard. If work clothing is provided, it must be provided in a clean and dry condition at least weekly, and daily if your airborne exposure to lead is greater than 200 ug/m(3). Appropriate protective work clothing and equipment can include coveralls or similar full-body work clothing, gloves, hats, shoes or disposable shoe coverlets, and face shields or vented goggles. Your employer is required to provide all such equipment at no cost to you. He is responsible for providing repairs and replacement as necessary, and also is responsible for the cleaning, laundering or disposal of protective clothing and equipment. Contaminated work clothing or equipment must be removed in change rooms and not worn home or you will extend your exposure and expose your family since lead from your clothing can accumulate in your house, car, etc. Contaminated clothing which is to be cleaned, laundered or disposed of must be placed in closed containers in the change room. At no time may lead be removed from protective clothing or equipment by any means which disperses lead into the workroom air.

VI. HOUSEKEEPING - PARAGRAPH (H)

Your employer must establish a housekeeping program sufficient to maintain all surfaces as free as practicable of accumulations of lead dust. Vacuuming is the preferred method of meeting this requirement, and the use of compressed air to clean floors and other surfaces is absolutely prohibited. Dry or wet sweeping, shoveling, or brushing may not be used except where vacuuming

or other equally effective methods have been tried and do not work. Vacuums must be used and emptied in a manner which minimizes the reentry of lead into the workplace.

VII. HYGIENE FACILITIES AND PRACTICES - PARAGRAPH (I)

The standard requires that change rooms, showers, and filtered air lunchrooms be constructed and made available to workers exposed to lead above the PEL. These requirements have temporarily been delayed by the court of appeals in situations where new facilities must be constructed, or where substantial renovations must be made to existing facilities. When the PEL is exceeded, the employer must assure that food and beverage is not present or consumed, tobacco products are not present or used, and cosmetics are not applied, except in these facilities. Change rooms, showers, and lunchrooms, must be used by workers exposed in excess of the PEL. After showering, no clothing or equipment worn during the shift may be worn home, and this includes shoes and underwear. Your own clothing worn during the shift should be carried home and cleaned carefully so that it does not contaminate your home. Lunchrooms may not be entered with protective clothing or equipment unless surface dust has been removed by vacuuming, downdraft booth, or other cleaning method. Finally, workers exposed above the PEL must wash both their hands and faces prior to eating, drinking, smoking or applying cosmetics.

All of the facilities and hygiene practices just discussed are essential to minimize additional sources of lead absorption from inhalation or ingestion of lead that may accumulate on you, your clothes, or your possessions. Strict compliance with these provisions can virtually eliminate several sources of lead exposure which significantly contribute to excessive lead absorption.

VIII. MEDICAL SURVEILLANCE - PARAGRAPH (J)

The medical surveillance program is part of the standard's comprehensive approach to the prevention of lead-related disease. Its purpose is to supplement the main thrust of the standard which is aimed at minimizing airborne concentrations of lead and sources of ingestion. Only medical surveillance can determine if the other provisions of the standard have affectively protected you as an individual. Compliance with the standard's provision will protect most workers from the adverse effects of lead exposure, but may not be satisfactory to protect individual workers (1) who have high body burdens of lead acquired over past years, (2) who have additional uncontrolled sources of non-occupational lead exposure, (3) who exhibit unusual variations in lead absorption rates, or (4) who have specific non-work related medical conditions which could be aggravated by lead exposure (e.g., renal disease, anemia). In addition, control systems may fail, or hygiene and respirator programs may be inadequate. Periodic medical surveillance of individual workers will help detect those failures. Medical surveillance will also be important to protect your reproductive ability-regardless of whether you are a man or woman.

All medical surveillance required by the standard must be performed by or under the supervision of a licensed physician. The employer must provide required medical surveillance without cost to employees and at a reasonable time and place. The standard's medical surveillance program has two parts-periodic biological monitoring and medical examinations.

Your employer's obligation to offer you medical surveillance is triggered by the results of the air monitoring program. Medical surveillance must be made available to all employees who are

exposed in excess of the action level for more than 30 days a year. The initial phase of the medical surveillance program, which includes blood lead level tests and medical examinations, must be completed for all covered employees no later than August 28, 1979. Priority within this first round of medical surveillance must be given to employees whom the employer believes to be at greatest risk from continued exposure (for example, those with the longest prior exposure to lead, or those with the highest current exposure). Thereafter, the employer must periodically make medical surveillance-both biological monitoring and medical examinations-available to all covered employees.

Biological monitoring under the standard consists of blood lead level (PbB) and zinc protoporphyrin tests at least every 6 months after the initial PbB test. A zinc protoporphyrin (ZPP) test is a very useful blood test which measures an effect of lead on your body. Thus biological monitoring under the standard is currently limited to PbB testing. If a worker's PbB exceeds 40 ug/100g the monitoring frequency must be increased from every 6 months to at least every 2 months and not reduced until two consecutive PbBs indicate a blood lead level below 40 ug/100g. Each time your PbB is determined to be over 40 ug/100g, your employer must notify you of this in writing within five working days of his receipt of the test results. The employer must also inform you that the standard requires temporary medical removal with economic protection when your PbB exceeds certain criteria. (See Discussion of Medical Removal Protection-Paragraph (k).) During the first year of the standard, this removal criterion is 80 ug/100g. Anytime your PbB exceeds 80 ug/100g your employer must make available to you a prompt follow-up PbB test to ascertain your PbB. If the two tests both exceed 80 ug/100g and you are temporarily removed, then your employer must make successive PbB tests available to you on a monthly basis during the period of your removal.

Medical examinations beyond the initial one must be made available on an annual basis if your blood lead level exceeds 40 ug/100g at any time during the preceding year. The initial examination will provide information to establish a baseline to which subsequent data can be compared. An initial medical examination must also be made available (prior to assignment) for each employee being assigned for the first time to an area where the airborne concentration of lead equals or exceeds the action level. In addition, a medical examination or consultation must be made available as soon as possible if you notify your employer that you are experiencing signs or symptoms commonly associated with lead poisoning or that you have difficulty breathing while wearing a respirator or during a respirator fit test. You must also be provided a medical examination or consultation if you notify your employer that you desire medical advice concerning the effects of current or past exposure to lead on your ability to procreate a healthy child.

Finally, appropriate follow-up medical examinations or consultations may also be provided for employees who have been temporarily removed from exposure under the medical removal protection provisions of the standard. (See Part IX, below.)

The standard specifies the minimum content of pre-assignment and annual medical examinations. The content of other types of medical examinations and consultations is left up to the sound discretion of the examining physician. Pre-assignment and annual medical examinations must include (1) a detailed work history and medical history, (2) a thorough physical examination, and (3) a series of laboratory tests designed to check your blood chemistry and your kidney function. In addition, at any time upon your request, a laboratory evaluation of male fertility will be made (microscopic examination of a sperm sample), or a pregnancy test will be given.

The standard does not require that you participate in any of the medical procedures, tests, etc. which your employer is required to make available to you. Medical surveillance can, however, play a very important role in protecting your health. You are strongly encouraged, therefore, to participate in a meaningful fashion. The standard contains a multiple physician review mechanism which would give you a chance to have a physician of your choice directly participate in the medical surveillance program. If you were dissatisfied with an examination by a physician chosen by your employer, you could select a second physician to conduct an independent analysis. The two doctors would attempt to resolve any differences of opinion, and select a third physician to resolve any firm dispute. Generally your employer will choose the physician who conducts medical surveillance under the lead standard-unless you and your employer can agree on the choice of a physician or physicians. Some companies and unions have agreed in advance, for example, to use certain independent medical laboratories or panels of physicians. Any of these arrangements are acceptable so long as required medical surveillance is made available to workers.

The standard requires your employer to provide certain information to a physician to aid in his or her examination of you. This information includes (1) the standard and its appendices, (2) a description of your duties as they relate to lead exposure, (3) your exposure level, (4) a description of personal protective equipment you wear, (5) prior blood lead level results, and (6) prior written medical opinions concerning you that the employer has. After a medical examination or consultation the physician must prepare a written report which must contain (1) the physician's opinion as to whether you have any medical condition which places you at increased risk of material impairment to health from exposure to lead, (2) any recommended special protective measures to be provided to you, (3) any blood lead level determinations, and (4) any recommended limitation on your use of respirators. This last element must include a determination of whether you can wear a powered air purifying respirator (PAPR) if you are found unable to wear a negative pressure respirator.

The medical surveillance program of the lead standard may at some point in time serve to notify certain workers that they have acquired a disease or other adverse medical condition as a result of occupational lead exposure. If this is true, these workers might have legal rights to compensation from public agencies, their employers, firms that supply hazardous products to their employers, or other persons. Some states have laws, including worker compensation laws, that disallow a worker who learns of a job-related health impairment to sue, unless the worker sues within a short period of time after learning of the impairment. (This period of time may be a matter of months or years.) An attorney can be consulted about these possibilities. It should be stressed that OSHA is in no way trying to either encourage or discourage claims or lawsuits. However, since results of the standard's medical surveillance program can significantly affect the legal remedies of a worker who has acquired a job-related disease or impairment, it is proper for OSHA to make you aware of this.

The medical surveillance section of the standard also contains provisions dealing with chelation. Chelation is the use of certain drugs (administered in pill form or injected into the body) to reduce the amount of lead absorbed in body tissues. Experience accumulated by the medical and scientific communities has largely confirmed the effectiveness of this type of therapy for the treatment of very severe lead poisoning. On the other hand, it has also been established that there can be a long list of extremely harmful side effects associated with the use of chelating agents. The medical community has balanced the advantages and disadvantages resulting from the use of chelating agents in various circumstances and has established when the use of these agents is acceptable. The standard includes these accepted limitations due to a history of abuse of chelation therapy by some

lead companies. The most widely used chelating agents are calcium disodium EDTA, (Ca Na2 EDTA), Calcium Disodium Versenate (Versenate), and d-penicillamine (pencillamine or Cupramine).

The standard prohibits "prophylactic chelation" of any employee by any person the employer retains, supervises or controls. "Prophylactic chelation" is the routine use of chelating or similarly acting drugs to prevent elevated blood levels in workers who are occupationally exposed to lead, or the use of these drugs to routinely lower blood lead levels to predesignated concentrations believed to be `safe'. It should be emphasized that where an employer takes a worker who has no symptoms of lead poisoning and has chelation carried out by a physician (either inside or outside of a hospital) solely to reduce the worker's blood lead level, that will generally be considered prophylactic chelation. The use of a hospital and a physician does not mean that prophylactic chelation is not being performed. Routine chelation to prevent increased or reduce current blood lead levels is unacceptable whatever the setting.

The standard allows the use of "therapeutic" or "diagnostic" chelation if administered under the supervision of a licensed physician in a clinical setting with thorough and appropriate medical monitoring. Therapeutic chelation responds to severe lead poisoning where there are marked symptoms. Diagnostic chelation involved giving a patient a dose of the drug then collecting all urine excreted for some period of time as an aid to the diagnosis of lead poisoning.

In cases where the examining physician determines that chelation is appropriate, you must be notified in writing of this fact before such treatment. This will inform you of a potentially harmful treatment, and allow you to obtain a second opinion.

IX. MEDICAL REMOVAL PROTECTION - PARAGRAPH (K)

Excessive lead absorption subjects you to increased risk of disease. Medical removal protection (MRP) is a means of protecting you when, for whatever reasons, other methods, such as engineering controls, work practices, and respirators, have failed to provide the protection you need. MRP involves the temporary removal of a worker from his or her regular job to a place of significantly lower exposure without any loss of earnings, seniority, or other employment rights or benefits. The purpose of this program is to cease further lead absorption and allow your body to naturally excrete lead which has previously been absorbed. Temporary medical removal can result from an elevated blood lead level, or a medical opinion. Up to 18 months of protection is provided as a result of either form of removal. The vast majority of removed workers, however, will return to their former jobs long before this eighteen month period expires. The standard contains special provisions to deal with the extraordinary but possible case where a longterm worker's blood lead level does not adequately decline during eighteen months of removal.

During the first year of the standard, if your blood lead level is 80 ug/100g or above you must be removed from any exposure where your air lead level without a respirator would be 100 ug/m(3) or above. If you are removed from your normal job you may not be returned until your blood lead level declines to at least 60 ug/100g. These criteria for removal and return will change according to the following schedule:

lead	Removal blood lead (ug/100 g)	Air lead (ug/m(3))	Return blood (ug/100 g)
After Mar. 1, 1980..	70 and above....	50 and above.	At or below 50.
After Mar. 1, 1981..	60 and above....	30 and above.	At or below 40.
After Mar. 1, 1983..	50 and above averaged over six months.....	30 and above.	Do.

You may also be removed from exposure even if your blood lead levels are below these criteria if a final medical determination indicates that you temporarily need reduced lead exposure for medical reasons. If the physician who is implementing your employers medical program makes a final written opinion recommending your removal or other special protective measures, your employer must implement the physician's recommendation. If you are removed in this manner, you may only be returned when the doctor indicates that it is safe for you to do so.

The standard does not give specific instructions dealing with what an employer must do with a removed worker. Your job assignment upon removal is a matter for you, your employer and your union (if any) to work out consistent with existing procedures for job assignments. Each removal must be accomplished in a manner consistent with existing collective bargaining relationships. Your employer is given broad discretion to implement temporary removals so long as no attempt is made to override existing agreements. Similarly, a removed worker is provided no right to veto an employer's choice which satisfies the standard.

In most cases, employers will likely transfer removed employees to other jobs with sufficiently low lead exposure. Alternatively, a worker's hours may be reduced so that the time weighted average exposure is reduced, or he or she may be temporarily laid off if no other alternative is feasible.

In all of these situation, MRP benefits must be provided during the period of removal - i.e., you continue to receive the same earnings, seniority, and other rights and benefits you would have had if you had not been removed. Earnings includes more than just your base wage; it includes overtime, shift differentials, incentives, and other compensation you would have earned if you had not been removed. During the period of removal you must also be provided with appropriate follow-up medical surveillance. If you were removed because your blood lead level was too high, you must be provided with a monthly blood test. If a medical opinion caused your removal, you must be provided medical tests or examinations that the doctor believes to be appropriate. If you do not participate in this follow up medical surveillance, you may lose your eligibility for MRP benefits.

When you are medically eligible to return to your former job, your employer must return you to your "former job status." This means that you are entitled to the position, wages, benefits, etc., you would have had if you had not been removed. If you would still be in your old job if no removal had occurred that is where you go back. If not, you are returned consistent with whatever

job assignment discretion your employer would have had if no removal had occurred. MRP only seeks to maintain your rights, not expand them or diminish them.

If you are removed under MRP and you are also eligible for worker compensation or other compensation for lost wages, your employer's MRP benefits obligation is reduced by the amount that you actually receive from these other sources. This is also true if you obtain other employment during the time you are laid off with MRP benefits.

The standard also covers situations where an employer voluntarily removes a worker from exposure to lead due to the effects of lead on the employee's medical condition, even though the standard does not require removal. In these situations MRP benefits must still be provided as though the standard required removal. Finally, it is important to note that in all cases where removal is required, respirators cannot be used as a substitute. Respirators may be used before removal becomes necessary, but not as an alternative to a transfer to a low exposure job, or to a lay-off with MRP benefits.

X. EMPLOYEE INFORMATION AND TRAINING - PARAGRAPH (L)

Your employer is required to provide an information and training program for all employees exposed to lead above the action level or who may suffer skin or eye irritation from lead. This program must inform these employees of the specific hazards associated with their work environment, protective measures which can be taken, the danger of lead to their bodies (including their reproductive systems), and their rights under the standard. In addition your employer must make readily available to all employees, including those exposed below the action level, a copy of the standard and its appendices and must distribute to all employees any materials provided to the employer by the Occupational Safety and Health Administration (OSHA).

Your employer is required to complete this training program for all employees by August 28, 1979. After this date, all new employees must be trained prior to initial assignment to areas where there is a possibility of exposure over the action level.

This training program must also be provided at least annually thereafter.

XI. SIGNS - PARAGRAPH (M)

The standard requires that the following warning sign be posted in work areas where the exposure to lead exceeds the PEL:

WARNING
LEAD WORK AREA
NO SMOKING OR EATING

XII. RECORDKEEPING - PARAGRAPH (N)

Your employer is required to keep all records of exposure monitoring for airborne lead. These records must include the name and job classification of employees measured, details of the sampling and analytic techniques, the results of this sampling, and the type of respiratory protection being worn by the person sampled. Your employer is also required to keep all records of biological monitoring and medical examination results. These must include the names of the employees, the physician's written opinion, and a copy of the results of the examination. All of the above kinds of records must be kept for 40 years, or for at least 20 years after your termination of employment, whichever is longer.

Recordkeeping is also required if you are temporarily removed from your job under the medical removal protection program. This record must include your name and social security number, the date of your removal and return, how the removal was or is being accomplished, and whether or not the reason for the removal was an elevated blood lead level. Your employer is required to keep each medical removal record only for as long as the duration of an employee's employment.

The standard requires that if you request to see or copy environmental monitoring, blood lead level monitoring, or medical removal records, they must be made available to you or to a representative that you authorize. Your union also has access to these records. Medical records other than PbB's must also be provided upon request to you, to your physician or to any other person whom you may specifically designate. Your union does not have access to your personal medical records unless you authorize their access.

XIII. OBSERVATIONS OF MONITORING - PARAGRAPH (O)

When air monitoring for lead is performed at your workplace as required by this standard, your employer must allow you or someone you designate to act as an observer of the monitoring. Observers are entitled to an explanation of the measurement procedure, and to record the results obtained. Since results will not normally be available at the time of the monitoring, observers are entitled to record or receive the results of the monitoring when returned by the laboratory. Your employer is required to provide the observer with any personal protective devices required to be worn by employees working in the area that is being monitored. The employer must require the observer to wear all such equipment and to comply with all other applicable safety and health procedures.

XIV. EFFECTIVE DATE - PARAGRAPH (P)

The standard's effective data is March 1, 1979, and employer obligations under the standard begin to come into effect as of that date.

XV. FOR ADDITIONAL INFORMATION

A. Copies of the Standard and explanatory material may be obtained by writing or calling the OSHA Docket Office, U.S. Department of Labor, room N2634, 200 Constitution Avenue, N.W., Washington DC 20210. Telephone: (202) 219-7894.

1. The standard and summary of the statement of reasons (preamble), Federal Register, Volume 43, pp. 52952-53014, November 14, 1978.
2. The full statement of reasons (preamble) Federal Register, vol. 43, pp. 54354-54509, November 21, 1978.
3. Partial Administrative Stay and Corrections to the standard, (44 FR 5446-5448) January 26, 1979.
4. Notice of the Partial Judicial Stay (44 FR 14554-14555) March 13, 1979.
5. Corrections to the preamble, Federal Register, vol. 44, pp. 20680-20681, April 6, 1979.
6. Additional correction to the preamble concerning the construction industry, Federal Register, vol. 44, p. 50338, August 28, 1979.
7. Appendices to the standard (Appendices A, B, C), Federal Register, Vol. 44, pp. 60980-60995, October 23, 1979.
8. Corrections to appendices, Federal Register, Vol. 44, 68828, November 30, 1979.
9. Revision to the standard and an additional appendix (Appendix D), Federal Register, Vol. 47, pp. 51117-51119, November 12, 1982.
10. Notice of reopening of lead rulemaking for nine remand industry sectors, Federal Register, vol. 53, pp. 11511-11513, April 7, 1988.
11. Statement of reasons, Federal Register, vol. 54, pp. 29142-29275, July 11, 1989.
12. Statement of reasons, Federal Register, vol. 55, pp. 3146-3167, January 30, 1990.
13. Correction to appendix B, Federal Register, vol. 55, pp. 4998-4999, February 13, 1991.
14. Correction to appendices, Federal Register, vol. 56, p. 24686, May 31, 1991.
15. California Codes of Regulation, Title 8, Section 5216: Lead Standard (CCR 8 §5216).

B. Additional information about the standard, its enforcement, and your employer's compliance can be obtained from the nearest OSHA Area Office listed in your telephone directory under United States Government/Department of Labor.

APPENDIX E

ADMINISTRATION FORMS

EXIDE TECHNOLOGIES
RESOURCE RECYCLING DIVISION
VERNON, CALIFORNIA

SPILL NOTIFICATION FORM

1) Date of Spill: _____ Time of Spill: _____ AM / PM

2) Material or Product Name: _____

3) Amount of Product Spilled: _____ Gallons

4) Location of Spill: _____

5) Was Spill contained inside the Plant: ☐ YES ☐ NO

6) Was Spill released to: ☐ Soil ☐ Surface Water ☐ Air

☐ Sanitary Sewer ☐ Groundwater

☐ Spill was not released to the Environment

7) Describe how spill was contained:

8) Describe how spill occurred:

9) Describe Clean-up procedures and where waste is located:

10) Describe how this and similar spills can be prevented in the future:

TELEPHONE NOTIFICATION FORM FOR RELEASES AND THREATENED RELEASES

Call the following agencies and provide the information indicated below to the extent it is known. (Do not delay notification in order to collect this information.)

National Response Center:	**1-800-424-8802**
Local Emergency Response Administering Agency:	**(323) 583-4821**
California State Warning Center:	**1-800-852-7550**
City of Vernon Department of Environmental Health:	**(323) 583-8811**

1. Name and phone number of the person making the report (notification):

2. Name and address of the facility:

   Exide Technologies
   Resource Recycling Division
   2700 South Indiana Avenue
   Vernon, California 90058
   (323) 262-1101

3. Type of incident (e.g., spill, fire, explosion):

4. Time, location, and duration of incident/release:

5. Names and quantities of any chemicals or substances released (to the extent known):

6. Identify any released materials that are listed as extremely hazardous substances in Appendix A of 40 CFR 355.

7. List media affected by the release (e.g., air, soil, water, offsite persons):

8. Identify any known or anticipated acute or chronic health problems and any advice regarding medical attention that may be necessary for exposed individuals:

9. Necessary actions to be taken as a result of the release (e.g., area evacuations):

10. Extent of injuries, if any:

11. Possible hazards to human health or the environment outside the facility:

CONTINGENCY PLAN IMPLEMENTATION REPORT

TO

THE CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
Department of Toxic Substances Control Reg. 3
9211 Oakdale Avenue
Chatsworth, California 91311

(To be submitted within 15 days of any incident requiring implementation of this Plan.)

Exide Technologies
Resource Recycling Division
2700 South Indiana Avenue
Vernon, California 90058
(323) 262-1101

12. Name and telephone number of individual making report:

13. Name and address of plant (see above).

14. Attach a copy of the Telephone Notification Report.

15. Estimated quantity and disposition of recovered material that resulted from the incident:

16. Cause of occurrence:

17. Period of occurrence, including exact dates and times:

18. Time occurrence expected to continue (if not already corrected):

19. Steps taken or planned to reduce, eliminate, and prevent recurrence:

California Emergency Release Follow-up Notice Reporting Form and Instruction Sheet

The following form is to be submitted to the California Chemical Emergency Planning and Response Commission (CEPRC) within 30 days of any release of a substance in excess of its reportable quantity which impacted soil or any offsite receptor (air, water, sewer, soil, or person).

APPENDIX F

ARRANGEMENTS WITH LOCAL AUTHORITIES

<< EXAMPLE LETTER >>

<< TO BE TRANSFERRED TO EXIDE TECHNOLOGIES LETTERHEAD >>

Date

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Contact Name
Organization
Address
City, State ZIP

Dear *Contact*:

In order to comply with Federal and State regulations and to better prepare ourselves should an accident or other emergency occur at the Exide Technologies facility in Vernon, California, we would like to ensure that you are familiar with our facility and the hazards associated with the industrial activities in which we are engaged. Enclosed with this letter is a copy of our most recent Crisis Management Plan/Contingency Plan for your information and records.

Exide Technologies operates a lead-acid battery recycling facility (secondary lead smelter) located at 2700 South Indiana Avenue, Vernon, CA 90058. The lead reclamation process involves hazardous materials and hazardous wastes that are used and stored on site. At this location, Exide also operates an industrial wastewater treatment plant, which is classified as a hazardous waste treatment facility.

We have developed the enclosed Crisis Management Plan/Contingency Plan per federal and state regulations for hazardous material handling, preparedness, and prevention. We would welcome interaction with your department to familiarize you with our operations, and to discuss emergency protocols. We invite you to meet with us at our facility, or if you feel a site visit is unnecessary, a phone call to discuss these subjects would be appreciated.

Please feel free to call me at (323) 262-1101, extension 259 if you have any questions, to discuss the contingency plan and emergency procedures, or to set up a facility visit. Thank you for your assistance.

Yours truly,

Exide Technologies

Nicolas Serieys
Interim Environmental Manager

Enclosure

APPENDIX G

REVISIONS LOG

Crisis Management Plan / Contingency Plan
Revision Log

Exide Technologies Vernon, California

Revision No. 0: Date: _____

Authorized Signature: _____

Title: _____

Revision No. 7 : Date: 03/02/10

Revisions Made: Vianey Mendez

Authorized Signature: _____

Title: _____

Revision No. 8 : Date: 09/30/11

Revisions Made: Update emergency contacts (Advanced GeoServices)

Authorized Signature: _____

Title: _____

Revision No. 9 : Date: 4/16/2012

Revisions Made: Update emergency contacts, suppliers, and address (Exide collaborative)

Authorized Signature: Ed Mopas

Title: Environmental Manager

Revision No. 10 : Date: 1/15/2013

Revisions Made: Update emergency contacts

Authorized Signature: Ed Mopas

Title: Environmental Manager

Revision No. 11 : Date: 3/15/2013

Revisions Made: Update emergency contacts

Authorized Signature: Ed Mopas

Title: Environmental Manager

Revision No. 12 : Date: 8/4/14

Revisions Made: Update emergency contacts

Authorized Signature: Ed Mopas

Title: Environmental Manager

Revision No. 13 : Date: 2/27/15

Revisions Made: Update emergency contacts

Authorized Signature: Nicolas Serieys

Title: Interim Environmental Manager

Revision No. 14 : Date: 4/1/15

Revisions Made: Update emergency contacts and notification procedures

Authorized Signature: Nicolas Serieys

Title: Interim Environmental Manager

Revision No. 15 : Date: 5/15/15

Revisions Made: Update emergency contacts

Authorized Signature: Nicolas Serieys

Title: Interim Environmental Manager

ATTACHMENT E

PAGE

PAGE
TRUCKING

PRODUCTION BUILD SHEET

EAST GENESIS *FRAMELESS DUMP* *TRAILER*

CODE: FL

SCHEDULE DATE: 2/24 - 4/13

CUSTOMER: PAGE TRUCKING **DATE:** 12/19/11 **SERIAL #** 47628 - 637

BODY SPECIFICATIONS

Length	40' - SLOPE NOSE			Body	
Width	102" OUTBOARD	Tarp	NONE	Accessories	1 PAIR OF MODEL 33 LIGHTS
Side Height	60" SOLID	Bow Holders	10 PR THRU TOP RAIL (5)		IN EXTERNAL BRACKET ON
Top Rail	4-1/2"	Tarp Bows	NONE		REAR POCKET
Side Material	20' - .140 WALL	Tarp Basket	NONE		
	xxxxxx	Tarp Hooks	4 ON TAILGATE ONLY		TAILGATE
	20' - .180 WALL	Bulkhead Mat'l	3/8"	Height	FULL - GENESIS
Side Options	NOTE (1)	Bulkhead	SLOPE NOSE	Mat'l Thkness	.140 WALL
Floor Mat'l	3/8"	Options	NOTE (5)	Slope	NONE
		Body Fenders	NONE	Hinges	OVERSLUNG
Crsmbr Spacing	8" ALL BOX C.M.(2)	Ladders (Out)	FIRST PANEL D/S	Side Swing	YES - GROUND CONTROL
			LAST PANEL D/S	Gateseal	RUBBER
Floor Options	ADD 3 ROWS OF FLOOR	Inside	D/S FIRST PANEL		
	STIFFNERS			Safety Latch	THREE - TWO ON BOTTOM +
		Shovel Hgr	BULKHEAD P/S OUTSIDE		ONE D/S 30" FROM BOTTOM
Tailgate Control	AIR + FRAME SWITCH (3)	Dirt Shedders	NONE	Coal/Grain Door	12"
Body Pkg	NONE	Light Panel	FULL - LED		
Options			OOO ooo OOO	Coal Chute	2-1/2"
Vibrator	NONE	Marker Lights	LED - 5 PR BOTTOM	Gate Options	NONE
Mudflaps	STD + SEE NOTE (4) +	MMTS	IN PIVOT BRACKET - LED		
	ACROSS REAR CHASSIS	Apron	NONE		

CHASSIS SPECIFICATIONS

Model	TANDEM	ABS	2S /1M	Tire Carrier	NONE
Length	PER ENGINEERING			Landing Gear	2 SPEED JOST A440
Width	102"				D/S CRANK
Draft Arms	ALUMINUM	Independ. Susp(s)			
Hoist	85-285		NONE		
				Elec Coupler	7 WAY
King Pin Setting	16" (6)	Distance:			
		From:			
5th Whl Ht	49"			Hyd Hose Fitting	WINGNUT
		Controls		Hyd Hose Length	108"
Rear Axle Setting	22-1/2"			Tow Hooks	ONE ON D/S
K/P To Rear Axle	TBD BY ENGINEERING			Paint	BLACK
Suspension	AAT30K / E2-1	Location			
Susp Control	FRAME SWITCH (3)	Axle(s)		Reflective Tape	NONE
Susp Spacing	52"				
Susp Options	SEE NOTE (6)	Accessories		Chassis	
Springs	AIR BAG			Options:	
Axles	TP SPINDLES	Brakes			
Accessories	25,000# GAWR RATING	Drums			
Brakes	16-1/2" x 7	Hubs			SEE NOTE (4)
Drums	CAST				
Hubs	10 S LWSTEEL - PILOT	Wheels			
Wheels	22.5" ALUM ALL MILL CB	Tires			
Tires	CUSTOMER SUPPLIED				

REMARKS:

(1) SIDE LINERS 1/8" x 45" HIGH - FULL LENGTH.

(2) ALL CROSSMEMBERS ARE BOX STYLE. CENTER 15' OF TRAILER USE PART # 557-99000-01. ALL OTHER CROSSMEMBERS TO BE PART# 557-99302-00.

(3) PUT ALL SWITCHES IN PLASTIC BOX ON SUBFRAME

(4) ADD CENTER CHASSIS FLAP 6" AHEAD OF SUSPENSION ADD EAST ANTI SAIL BRACKETS ON OUTER FRONT FLAPS. CENTER CHASSIS FLAP ACROSS REAR.

(5) FRONT ROLL CAP- PER ENGINEERING.

(6) AIR GAUGE FOR BAG PRESSURE ON UPPER COUPLER w / EYEBROW WELDED OVER GAUGE FOR PROTECTION

SALESPERSON: MF

WEIGHT: 13,598

ATTACHMENT F

END DUMP DECONTAMINATION CHECKLIST
EXIDE TECHNOLOGIES
VERNON, CALIFORNIA

INSPECTION DATE: _____ INSPECTION DAY: _____
INSPECTOR: _____ _____

NOTE: IF THIS INSPECTION HAS "NO" CIRCLED, THE TRAILER MUST NOT BE ALLOWED TO BE SHIPPED WITHOUT CORRECTING THE "NO"

							Has visible dust and material been removed from :			
Trailer Number	Have liners been secured over wastes?		Is the trailer tarp secured?		Are tarp securing latches/straps in good condition?		Trailer sides		Truck and trailer wheels and sides	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

NOTE: IF THIS INSPECTION HAS "NO" CIRCLED, THE TRAILER MUST NOT BE ALLOWED TO BE SHIPPED WITHOUT CORRECTING THE "NO"

END DUMP TRAILER PRE-LOADING CHECKLIST
EXIDE TECHNOLOGIES
VERNON, CALIFORNIA

INSPECTION DATE: _____ INSPECTION DAY: _____
INSPECTOR: _____ _____

NOTE: IF THIS INSPECTION HAS "NO" CIRCLED, THE TRAILER MUST BE NOT USED UNTIL REPAIRED !!!

Trailer Number	Is gasket in good condition?		Are hinges in good condition?		Are the floor, walls & tarp free of any holes?		Are two 6-mil liners present in the trailer?	
	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO

Temporary Decon Station Inspection Check list. Must be inspected prior to every truck being loaded.
If any inspection contains a NO all decontamination must immediately cease and be repaired prior to restart of activities.

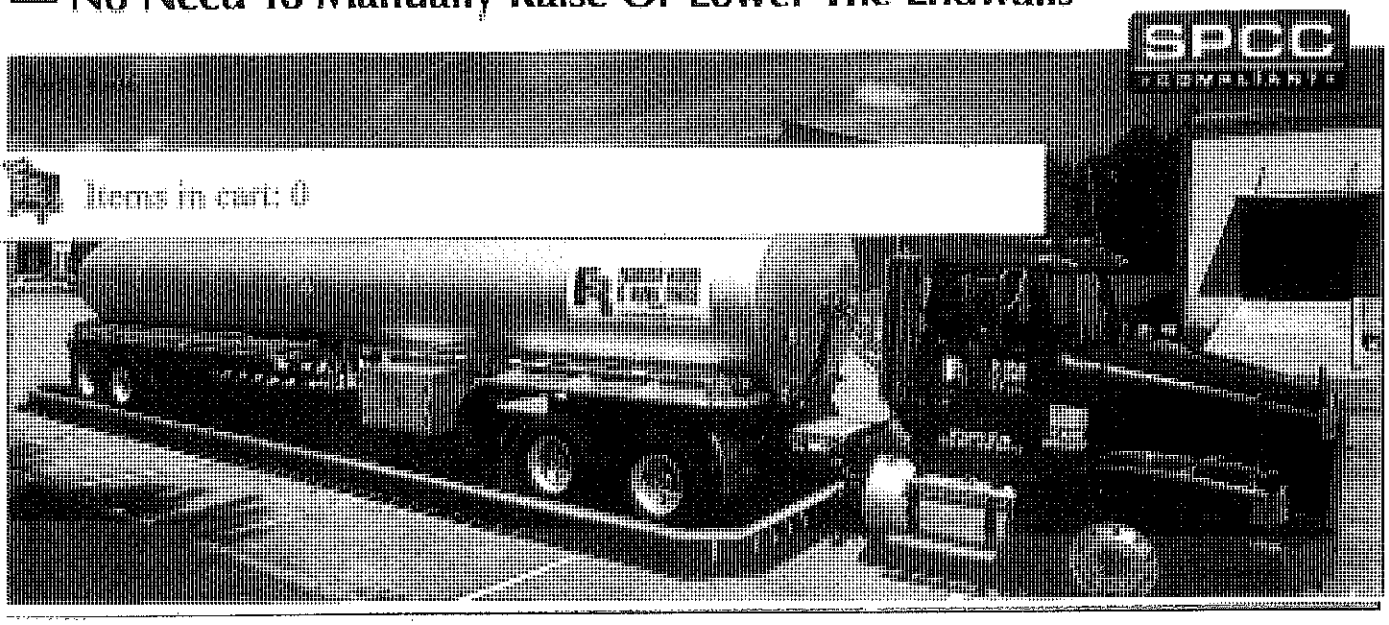
INSPECTION DATE:_____ INSPECTION DAY: _____
INSPECTOR: _____ _____

NOTE: IF THIS INSPECTION HAS "NO" CIRCLED, THE PROCESS MUST BE STOPPED IMMEDAITELY AND CORRECTIVE MEASURES IMPLEMENTED PRIOR TO RESTARTING DECONTAMINTATION

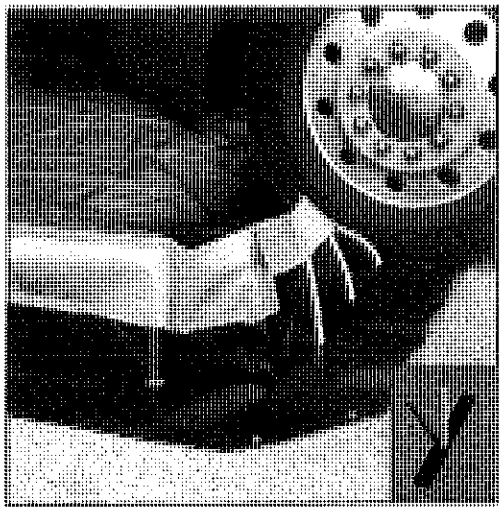
Truck Number	Is decon station free of visible damage?		Are there any visible free liquids outside of the temporary decontamination area?		Notes
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	
	YES	NO	YES	NO	

ATTACHMENT G

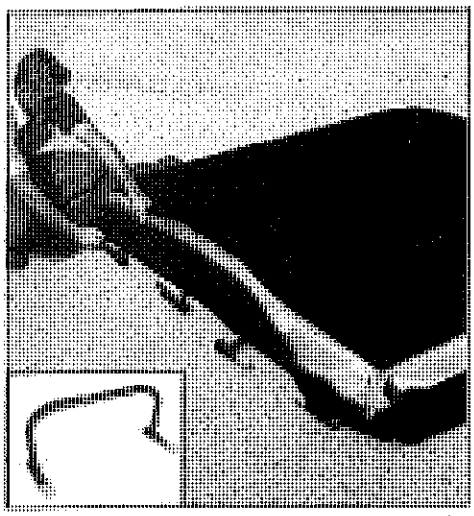
Unique, "Living Hinge" Design Allows Hands-Free Drive In/Drive Out — No Need To Manually Raise Or Lower The Endwalls



- Entry and exit walls are supported every 12" with a patented "living hinge".
- Once a vehicle has entered or exited, the walls automatically spring back to their vertical position.
- Both long sidewalls are held upright by PVC sidewall assemblies. Simply swivel the feet to lower the sidewalls for storage or transport to another location.
- Meets SPCC and EPA Container Storage Regulation 40 CFR 264.175.



Two-way "living hinge" design allows convenient, hands-free drive in/drive out.



PVC sidewall assemblies can be easily lowered and raised.

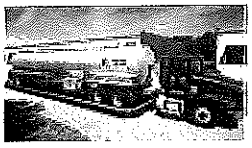
Drive-in/drive-out endwalls teamed up with collapsible sidewalls offer the ultimate combination — "Hands Free" convenience and an affordable design!

Custom sizes available.

ULTRA-CONTAINMENT BERMS, ULTIMATE MODEL

Part #	Dimensions	Weight	Containment Capacity
8508	12' x 60' x 1' (3.7 m x 18.3 m x .3 m)	309 lbs. (140 kg)	5,385 gallons (20,382 L)
8506	15' x 50' x 1' (4.6 m x 15.2 m x .3 m)	326 lbs. (148 kg)	5,610 gallons (21,234 L)
8507	15' x 66' x 1' (4.6 m x 20.1 m x .3 m)	405 lbs. (184 kg)	7,405 gallons (28,028 L)

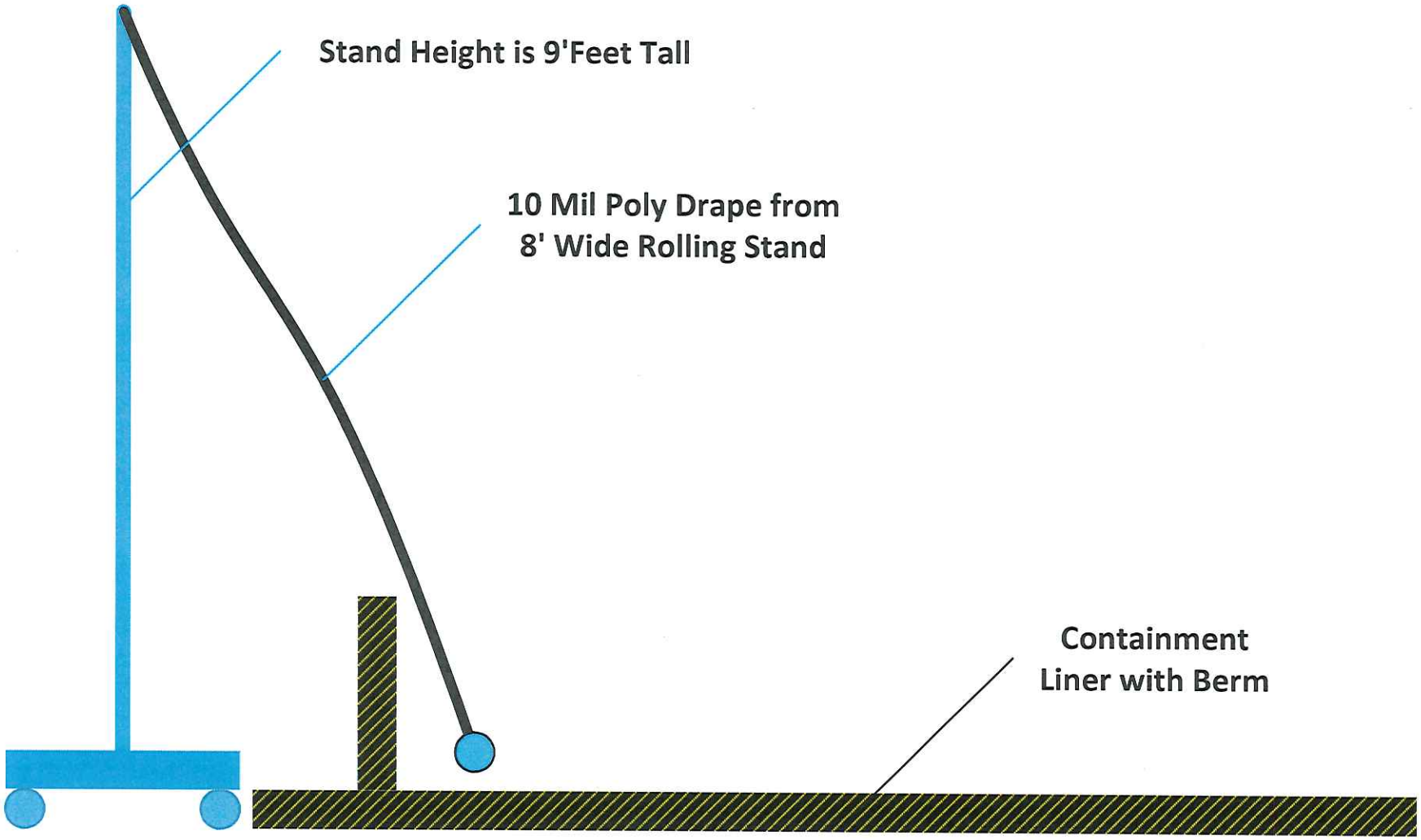
Materials of Construction: Copolymer 2000™ an ethylene copolymer, is standard. Copolymer 3000™, XR5, polyurethane and other materials are also available on a custom basis.
Options: Ground Tarps, Track Belts, Self Bailer, see page 31.



Ultimate Model Containment Berm

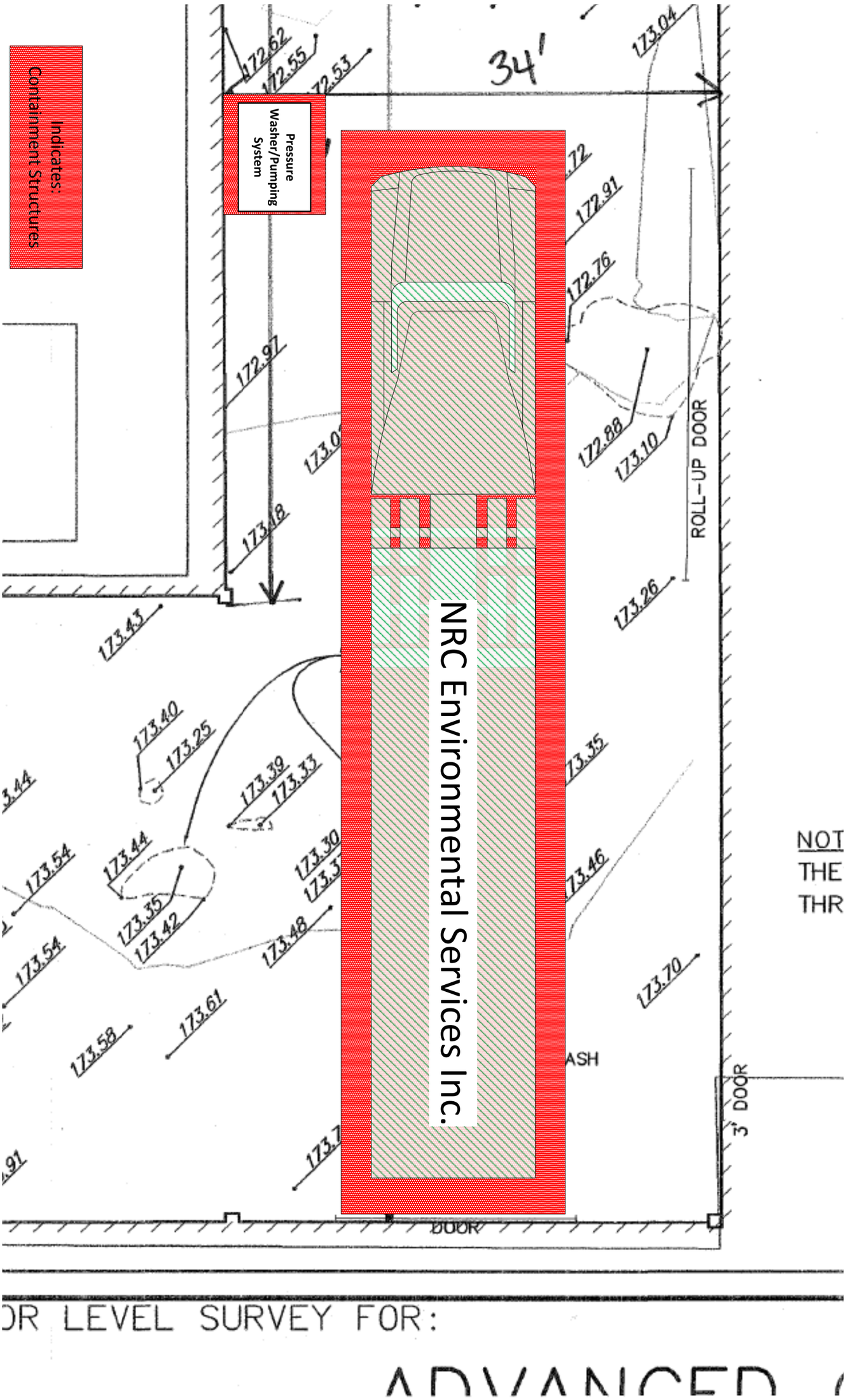
Unique, "Living Hinge" Design Allows Hands-Free Drive In/Drive Out - No Need To Manually Raise Or Lower The Endwalls.

Berm Size & Capacity 15' x 66' x 1' - 7405 gal - #8507



NRC Proposed Drape Systems for Decon Wash Spray Control

N.T.S


Indicates Containment Structures
Pressure Washer/Pumping System
NRC Environmental Services Inc.
34'
ROLL-UP DOOR
3' DOOR
DOOR
ASH
172.62
172.55
172.53
173.04
172.91
172.76
172.97
172.88
173.10
173.18
173.26
173.43
173.40
173.25
173.39
173.33
173.35
173.44
173.54
173.30
173.46
173.42
173.48
173.70
173.61
173.58
NOT
THE
THR
OR LEVEL SURVEY FOR:
ADVANCED

ATTACHMENT H

Hazardous Materials Route Summary
Vernon,CA to Muncie,IN

Origin:	Vernon,CA
Destination:	Muncie,IN
Driving Distance:	2144.0 miles
Driving Time:	35:02
Route Type:	53 ft. MileMaker Practical Route
Locations:	Flagstaff,AZ
	Oklahoma Cy,OK

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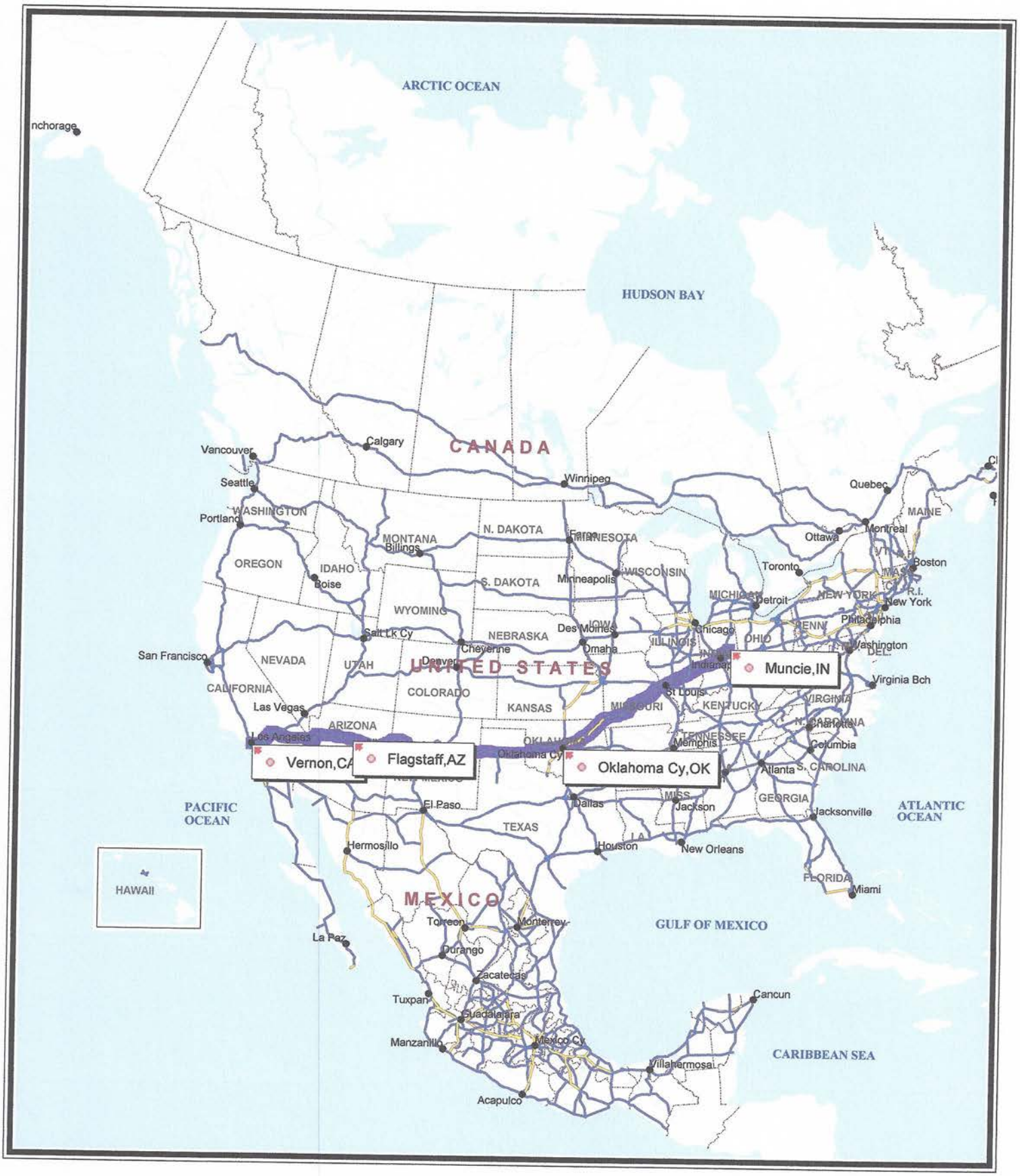
Hazardous Materials Overview Map
Vernon,CA to Muncie,IN



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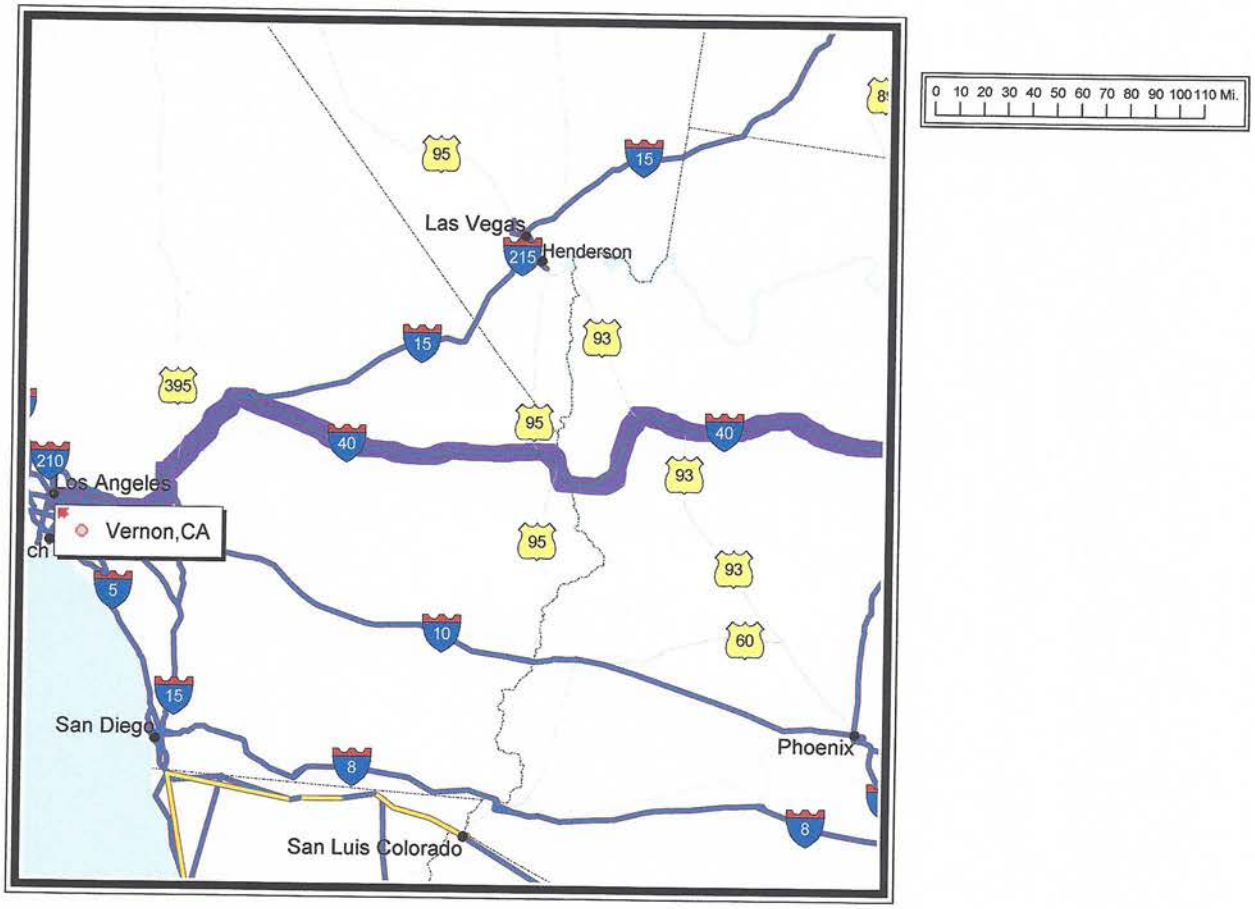
ALAMEDA ST
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
ALAMEDA ST	N	3	SE OF LOS ANGELES,CA	0:15	3		p.14-15,SJ-11
US 101	E	1	SE OF LOS ANGELES,CA	0:16	4		p.14-15,SJ-11
SN BERDINO FRWY	E	40	NW OF MIRA LOMA,CA	1:03	44		p.14-15,SJ-13
I 15	N	73	SE OF BARSTOW,CA	2:21	118		p.14-15,SH-14
I 40	E	155	CA/AZ STATE LINE	5:02	273		p.8-9,G-2
I 40	E	195	FLAGSTAFF,AZ	8:02	467	VIA	p.8-9,F-8

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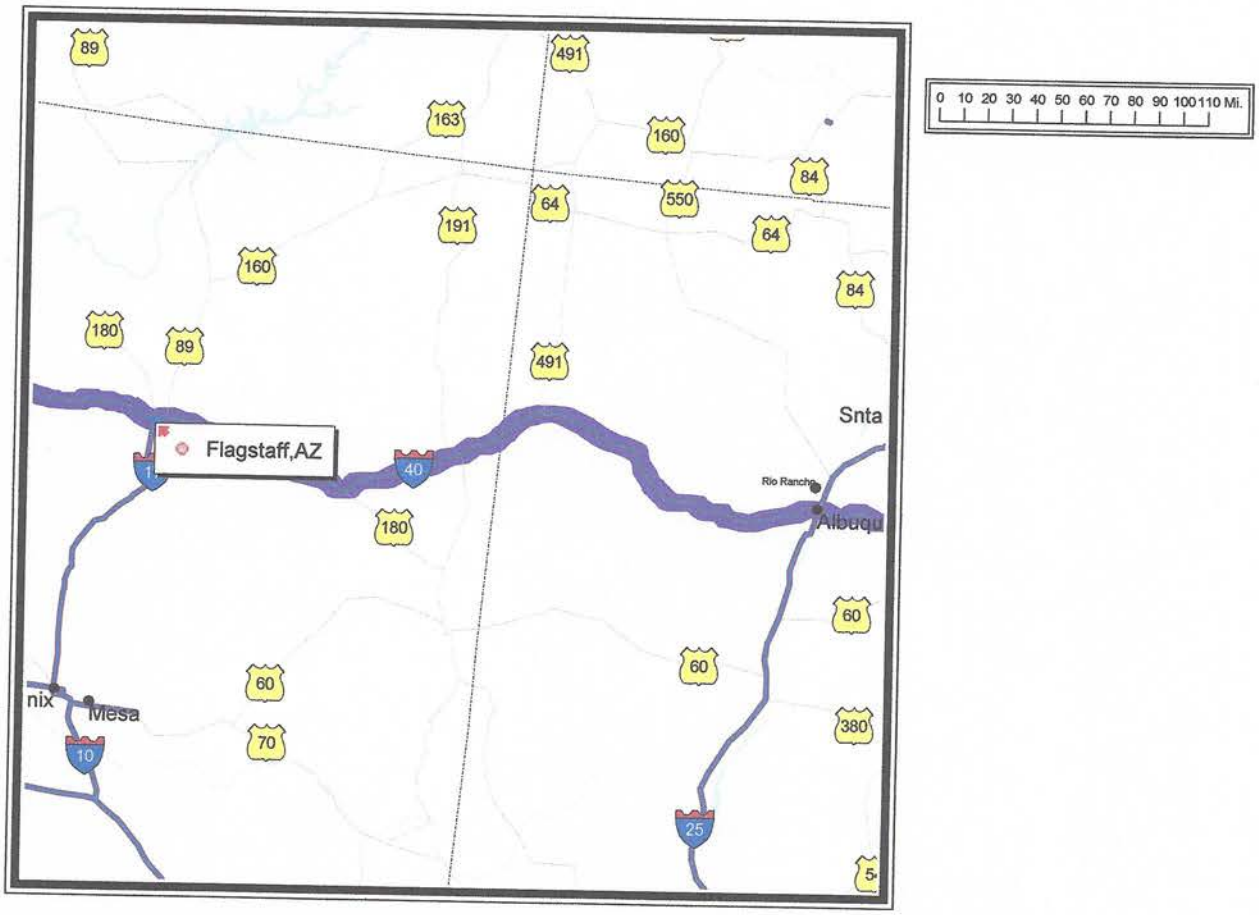
I 40
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	195	FLAGSTAFF,AZ	8:02	467	VIA	p.8-9,F-8
I 40	E	164	AZ/NM STATE LINE	10:35	632		p.8-9,E-14
I 40	E	373	NM/TX STATE LINE	16:22	1005		p.98-99,WD-8

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I 40
Vernon,CA to Muncie,IN

Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	373	NM/TX STATE LINE	16:22	1005		p.98-99,WD-8
I 40	E	177	TX/OK STATE LINE	19:14	1182		p.82-83,G-7

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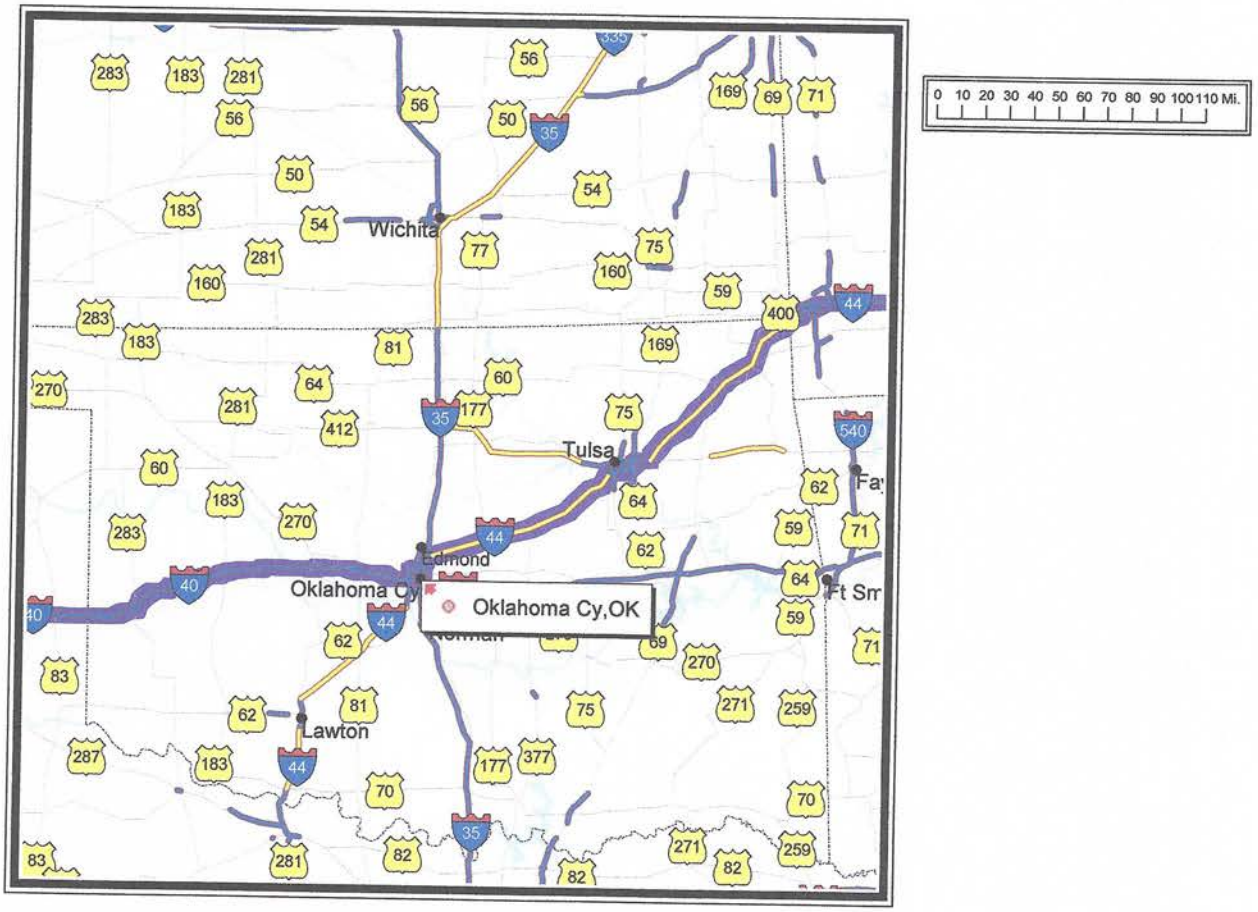
I 40
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	177	TX/OK STATE LINE	19:14	1182		p.82-83,G-7
I 40	E	147	W OF OKLAHOMA CY,OK	21:34	1329		p.82-83,F-13
I 44	E	8	N OF OKLAHOMA CY,OK	21:42	1337		p.82-83,F-13
I 235	S	5	OKLAHOMA CY,OK	21:47	1342	VIA	p.82-83,F-13
I 35	N	11	SW OF ARCADIA,OK	21:58	1353		p.82-83,F-13
I 44	E	195	OK/MO STATE LINE	25:00	1547	TL	p.40-41,J-19
I 44	E	290	ST LOUIS,MO	29:30	1838		p.58-59,G-18

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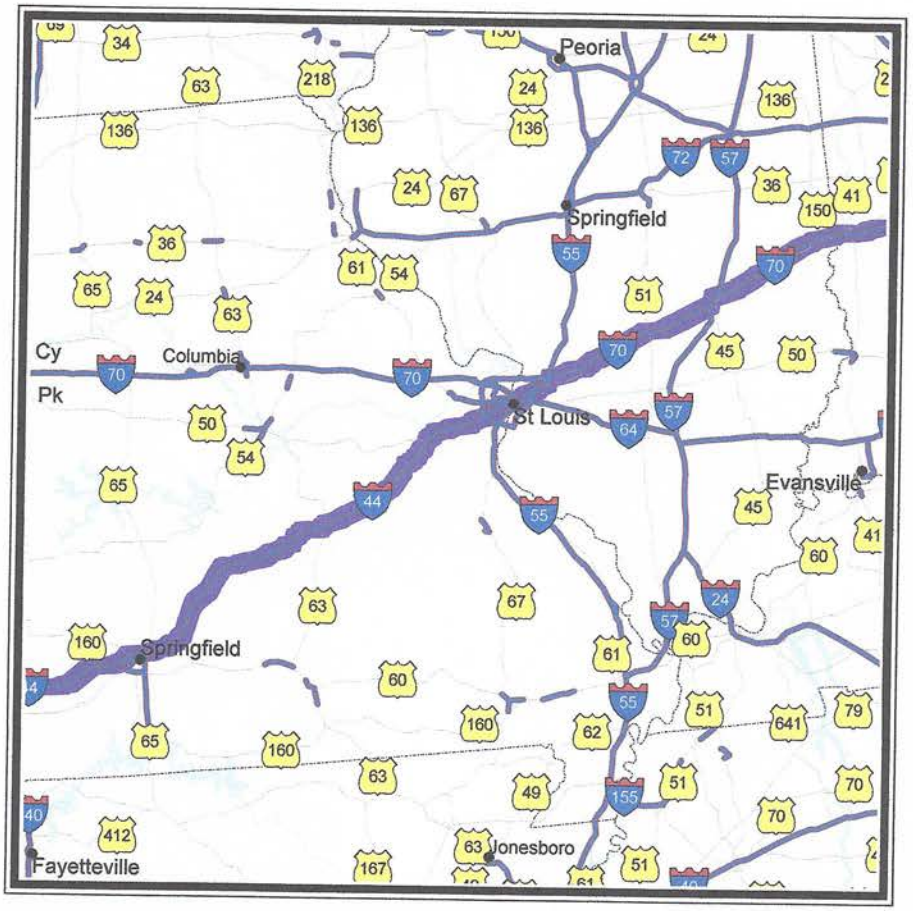
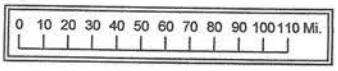
I 44
Vernon,CA to Muncie,IN





Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 44	E	290	ST LOUIS,MO	29:30	1838		p.58-59,G-18
I 55	N	2	MO/IL STATE LINE	29:32	1839	BR	p.58-59,G-18
I 55	N	19	NW OF TROY,IL	29:53	1859	BR	p.32-33,N-7
I 70	E	141	IL/IN STATE LINE	32:19	2000		p.32-33,L-13
I 70	E	73	W OF INDIANAPOLIS,IN	33:35	2073		p.36-37,K-8

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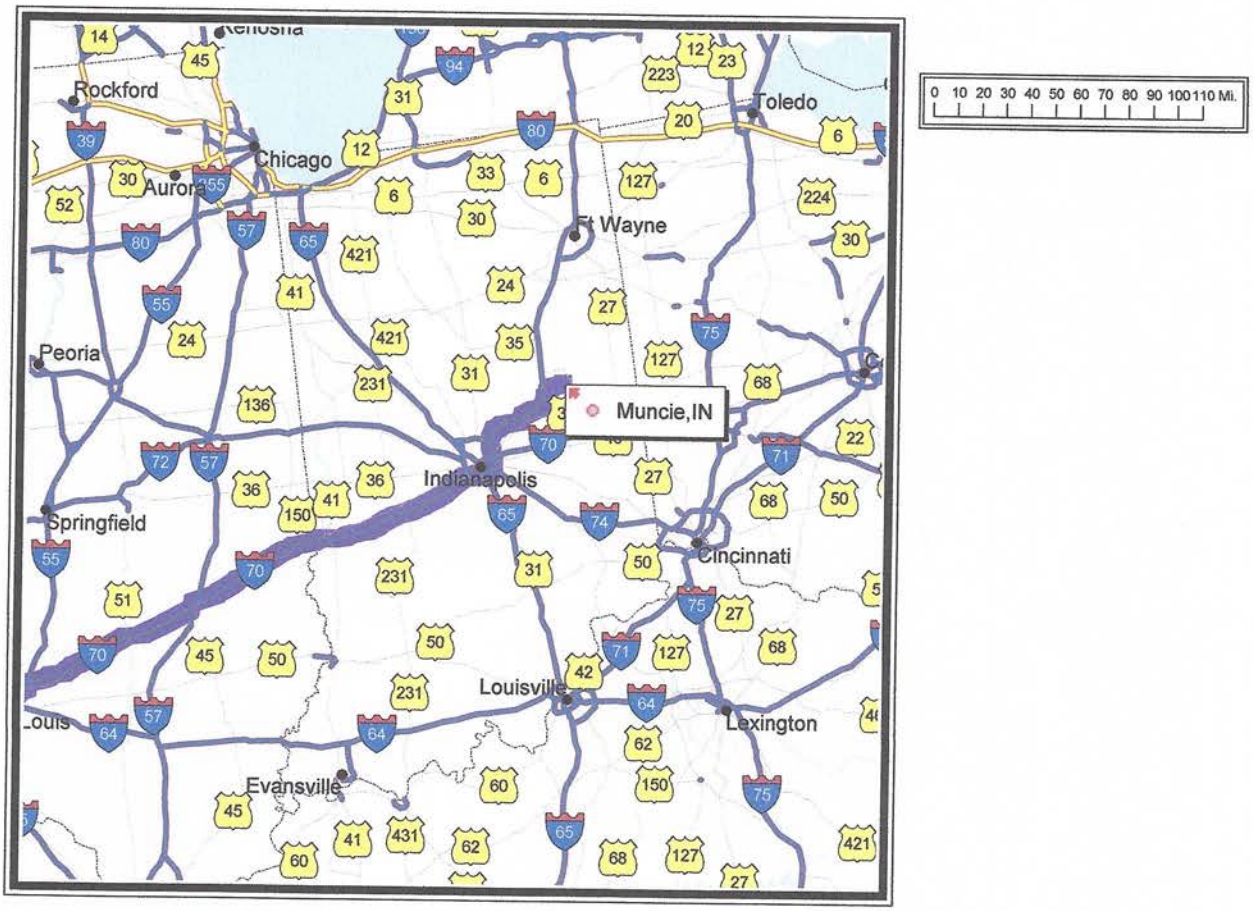
I 70
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 70	E	73	W OF INDIANAPOLIS,IN	33:35	2073		p.36-37,K-8
I 465	E	26	NE OF INDIANAPOLIS,IN	34:04	2098		p.36-37,J-9
I 69	N	34	SW OF DALEVILLE,IN	34:41	2132		p.36-37,I-11
IN 32	E	12	MUNCIE,IN	35:02	2144		p.36-37,H-12

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mapquest

Notes

Trip to:

Exide Technologies
2601 W Mt Pleasant Blvd
Muncie, IN 47302
(765) 747-9980
2129.65 miles / 32 hours 36 minutes

Exide Technologies
2700 S Indiana St, Vernon, CA 90058
(323) 262-1101

Download Free App

1. Start out going **south** on **S Indiana St** toward **Bandini Blvd.** Map	**0.05 Mi** *0.05 Mi Total*
2. Turn **left** onto **Bandini Blvd.** Map	**1.2 Mi** *1.2 Mi Total*
3. Merge onto **I-710 N / Long Beach Fwy N** via the ramp on the **left.** Map	**2.1 Mi** *3.3 Mi Total*
4. Merge onto **CA-60 E / Pomona Fwy E** via **EXIT 20A** toward **Pomona.** Map	**8.7 Mi** *11.9 Mi Total*
5. Merge onto **I-605 N / San Gabriel River Fwy N** via **EXIT 12.** Map	**8.2 Mi** *20.2 Mi Total*
6. Merge onto **I-210 E / Foothill Fwy E** via **EXIT 27A** toward **San Bernardino.** Map	**8.7 Mi** *28.9 Mi Total*
7. **I-210 E / Foothill Fwy E** becomes **CA-210 E / Foothill Fwy E.** Map	**18.1 Mi** *47.0 Mi Total*
8. Merge onto **I-15 N** via **EXIT 64A** toward **Barstow.** Map	**67.5 Mi** *114.5 Mi Total*
9. Keep **right** to take **I-40 E** via **EXIT 184A** toward **Needles** (Passing through **Arizona**, **New Mexico** and **Texas**, then crossing into **Oklahoma**). Map	**1202.6 Mi** *1317.1 Mi Total*
10. Take the **Kilpatrick Turnpike** exit, **EXIT 139.** Map	**0.8 Mi** *1317.9 Mi Total*
11. Keep **right** at the fork in the ramp. Map	**0.4 Mi** *1318.4 Mi Total*
12. Merge onto **John Kilpatrick Turnpike E** (Portions toll). Map	**25.2 Mi** *1343.6 Mi Total*
13. **John Kilpatrick Turnpike E** becomes **I-44 E** (Portions toll). Map	**87.3 Mi** *1430.9 Mi Total*

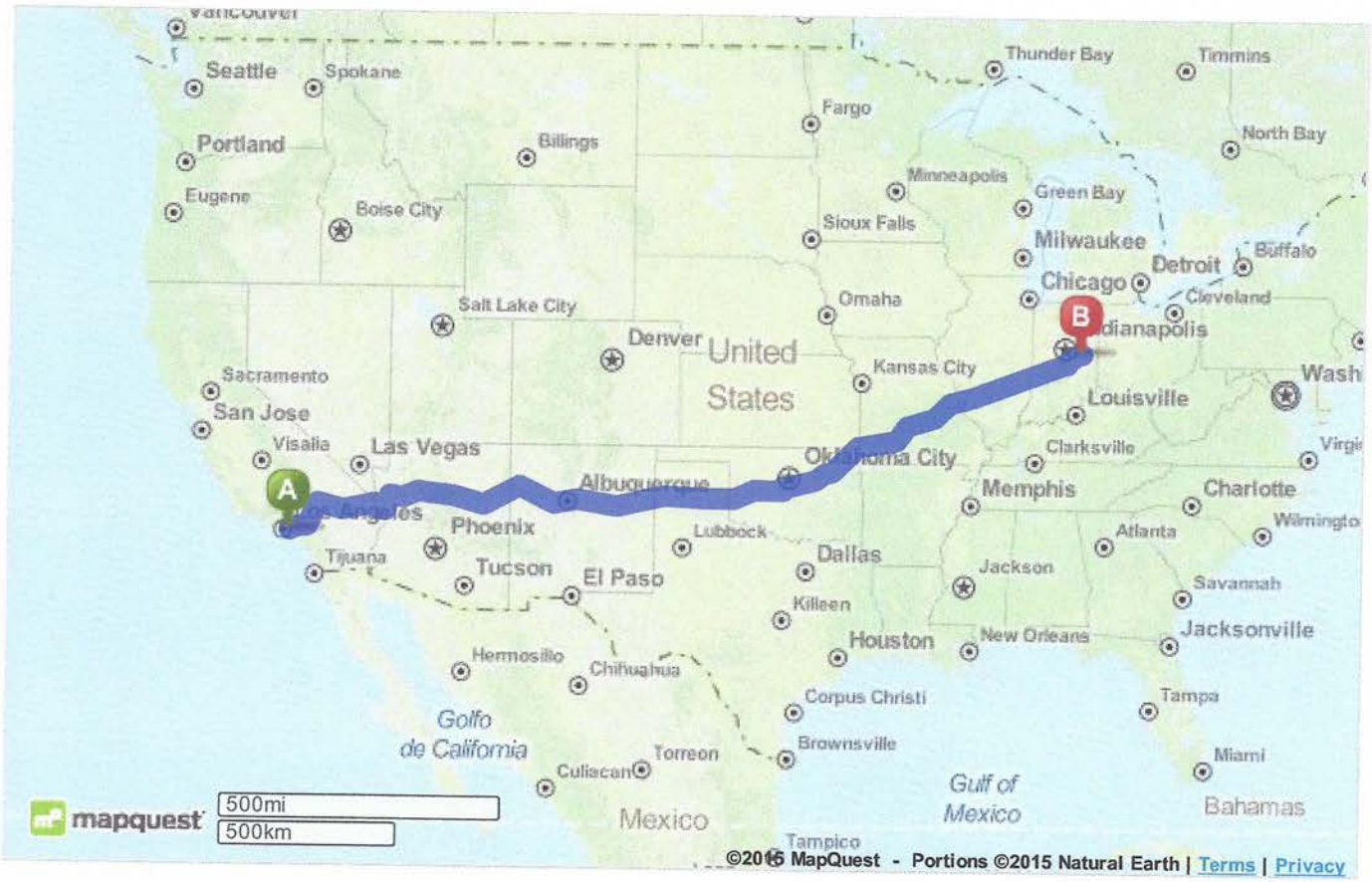
EAST 44

	14. Keep **right** to take **I-44 E** toward **Joplin** (Portions toll) (Crossing into **Missouri**). Map	**398.3 Mi** *1829.2 Mi Total*
	15. Merge onto **I-55 N / I-64 E / US-40 E** via **EXIT 291A** toward **I-70 E / Illinois** (Crossing into **Illinois**). Map	**3.1 Mi** *1832.2 Mi Total*
	16. Keep **left** to take **I-55 N** toward **Great River Road N / Chicago / Indianapolis**. Map	**16.2 Mi** *1848.4 Mi Total*
	17. Merge onto **I-70 E** via **EXIT 20A** toward **Indianapolis** (Crossing into **Indiana**). Map	**223.9 Mi** *2072.4 Mi Total*
	18. Keep **right** to take **I-70 E** via **EXIT 112A** toward **Columbus OH**. Map	**5.7 Mi** *2078.0 Mi Total*
	19. Take the **I-465 / IN-37 N / US-421 N / I-70 E / IN-37 S / US-36 / US-421 S** exit, **EXIT 89**. Map	**0.9 Mi** *2078.9 Mi Total*
	20. Merge onto **I-465 N / US-31 N / US-52 W / US-421 N / IN-37 N / USS Indianapolis Memorial Hwy N**. Map	**7.1 Mi** *2086.0 Mi Total*
	21. Merge onto **I-69 N** via **EXIT 37** toward **Ft Wayne**. Map	**33.5 Mi** *2119.5 Mi Total*
	22. Take the **IN-67 N / IN-32** exit, **EXIT 234**, toward **Anderson / Muncie**. Map	**0.4 Mi** *2119.9 Mi Total*
	23. Turn **right** onto **W Commerce Rd / IN-67 / County Hwy-550**. Continue to follow **IN-67**. Map	**7.7 Mi** *2127.6 Mi Total*
	24. Take the ramp toward **Hoyt Ave**. Map	**0.3 Mi** *2127.9 Mi Total*
	25. Merge onto **S Old State Road 67**. Map	**0.3 Mi** *2128.2 Mi Total*
	26. Stay **straight** to go onto **S Old State Highway 67**. Map	**0.05 Mi** *2128.3 Mi Total*
	27. **S Old State Highway 67** becomes **S Old State Road 67**. Map	**0.09 Mi** *2128.4 Mi Total*
	28. Turn **slight left** onto **S Hoyt Ave**. Map	**0.9 Mi** *2129.3 Mi Total*
	29. Take the 2nd **right** onto **W Mt Pleasant Blvd**. Map	**0.4 Mi** *2129.6 Mi Total*
	30. **2601 W MT PLEASANT BLVD** is on the **right**. Map	

Exide Technologies

2601 W Mt Pleasant Blvd, Muncie, IN 47302
(765) 747-9980

Total Travel Estimate: **2129.65 miles - about 32 hours 36 minutes**



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Notes

Trip to:

[100 - 198] E Highway 95 N

Beatty, NV 89003

313.68 miles / 5 hours 6 minutes

Exide Technologies
2700 S Indiana St, Vernon, CA 90058
(323) 262-1101

Download Free App

1. Start out going **south** on **S Indiana St** toward **Bandini Blvd**. Map	**0.05 Mi** *0.05 Mi Total*
2. Turn **left** onto **Bandini Blvd**. Map	**1.2 Mi** *1.2 Mi Total*
3. Merge onto **I-710 N / Long Beach Fwy N** via the ramp on the **left**. Map	**2.1 Mi** *3.3 Mi Total*
4. Merge onto **CA-60 E / Pomona Fwy E** via **EXIT 20A** toward **Pomona**. Map	**8.7 Mi** *11.9 Mi Total*
5. Merge onto **I-605 N / San Gabriel River Fwy N** via **EXIT 12**. Map	**8.2 Mi** *20.2 Mi Total*
6. Merge onto **I-210 E / Foothill Fwy E** via **EXIT 27A** toward **San Bernardino**. Map	**8.7 Mi** *28.9 Mi Total*
7. **I-210 E / Foothill Fwy E** becomes **CA-210 E / Foothill Fwy E**. Map	**18.1 Mi** *47.0 Mi Total*
8. Merge onto **I-15 N** via **EXIT 64A** toward **Barstow**. Map	**67.5 Mi** *114.5 Mi Total*
9. Keep **left** to take **I-15 N** toward **Las Vegas**. Map	**62.2 Mi** *176.8 Mi Total*
10. Take the **CA-127 / Kelbaker Rd** exit, **EXIT 246**, toward **Death Valley**. Map	**0.3 Mi** *177.1 Mi Total*
11. Turn **left** onto **CA-127 / Death Valley Rd**. Continue to follow **CA-127** (Crossing into **Nevada**). Map	**90.7 Mi** *267.7 Mi Total*
12. **CA-127** becomes **S Highway 373 / NV-373**. Map	**16.4 Mi** *284.1 Mi Total*
13. Turn **left** onto **US-95 N**. Map	**29.4 Mi** *313.5 Mi Total*
14. Turn **right** onto **W Main St / US-95 N**. Map	**0.2 Mi**

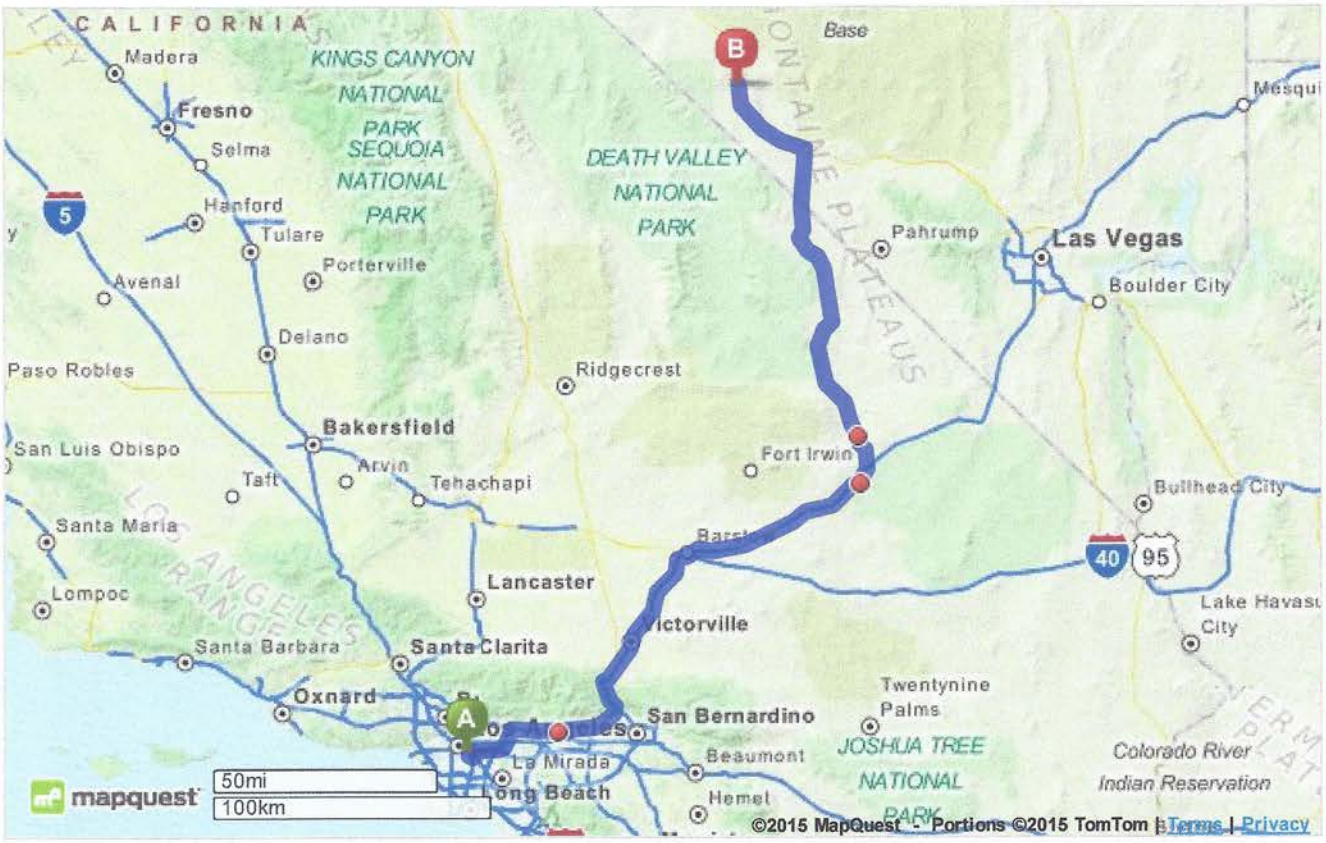
313.7 Mi Total

NORTH 95

15. **[100 - 198] E HIGHWAY 95 N**. Map

B **[100 - 198] E Highway 95 N**, Beatty, NV 89003

Total Travel Estimate: **313.68 miles - about 5 hours 6 minutes**



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Trip to:

Conecsus LLC
106 Tejas Dr
Terrell, TX 75160
(972) 524-1075
1467.42 miles / 22 hours 9 minutes

Notes

	2700 S Indiana St, Vernon, CA 90058-4202	Download Free App
	1. Start out going **south** on **S Indiana St** toward **Bandini Blvd**. Map	**0.04 Mi** *0.04 Mi Total*
	2. Turn **left** onto **Bandini Blvd**. Map	**1.2 Mi** *1.2 Mi Total*
NORTH 710	3. Merge onto **I-710 N / Long Beach Fwy N** via the ramp on the **left**. Map *If you reach Pennington Way you've gone about 0.1 miles too far*	**2.1 Mi** *3.3 Mi Total*
20A EXIT EAST 60	4. Merge onto **CA-60 E / Pomona Fwy E** via **EXIT 20A** toward **Pomona**. Map	**22.3 Mi** *25.6 Mi Total*
SOUTH 215	5. Keep **left** to take **I-215 S / CA-60 E / Escondido Fwy S / Moreno Valley Fwy E** toward **Pomona / Riverside**. Map	**32.3 Mi** *57.9 Mi Total*
29 EXIT EAST 60	6. Keep **left** to take **CA-60 E** via **EXIT 29** toward **Indio**. Map	**18.0 Mi** *75.9 Mi Total*
EAST 10	7. Merge onto **I-10 E** via the exit on the **left**. Map	**50.9 Mi** *126.8 Mi Total*
EAST 10	8. Keep **left** to take **I-10 E / Pearl Harbor Memorial Highway** toward **Blythe / Phoenix** (Crossing into **Arizona**). Map	**252.9 Mi** *379.7 Mi Total*
EAST 10	9. Keep **left** to take **I-10 E** toward **Tucson / Guadalupe** (Passing through **New Mexico**, then crossing into **Texas**). Map	**588.4 Mi** *968.2 Mi Total*
EAST 20	10. Take **I-20 E** toward **Ft Worth / Dallas**. Map	**421.1 Mi** *1389.3 Mi Total*
EAST 20	11. Keep **right** to take **I-20 E** toward **Dallas / Shreveport**. Map	**21.2 Mi** *1410.5 Mi Total*
EAST 20	12. Keep **right** to take **I-20 E** toward **Dallas / Little Rd / Waxahachie**. Map	**37.3 Mi** *1447.8 Mi Total*
EAST 20	13. Keep **left** to take **I-20 E** toward **Shreveport**. Map	**17.9 Mi** *1465.7 Mi Total*

Total Travel Estimate: **1467.42 miles - about 22 hours 9 minutes**

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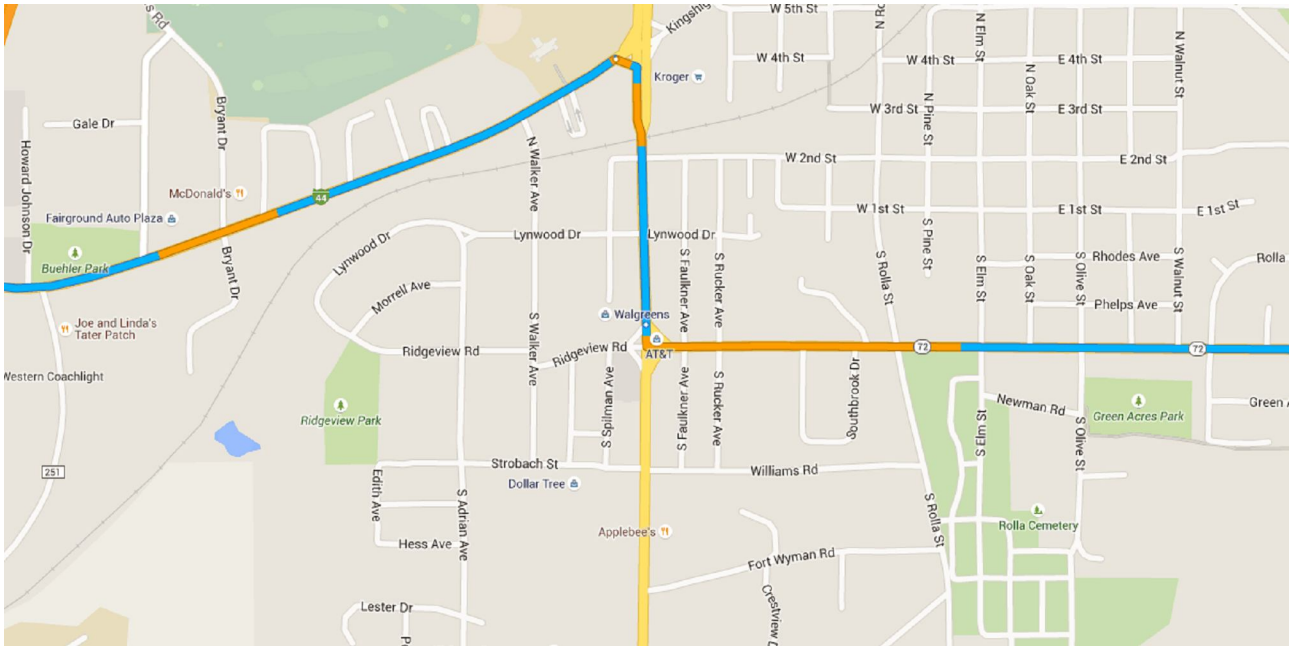
Google

Drive 1,777 miles, 26 h

Directions from 2700 S Indiana St to Doe Run Co



2700 S Indiana St

Vernon, CA 90058

Get on I-710 N/Long Beach Fwy

1.5 mi / 5 min

1. Head south on S Indiana St toward Bandini Blvd

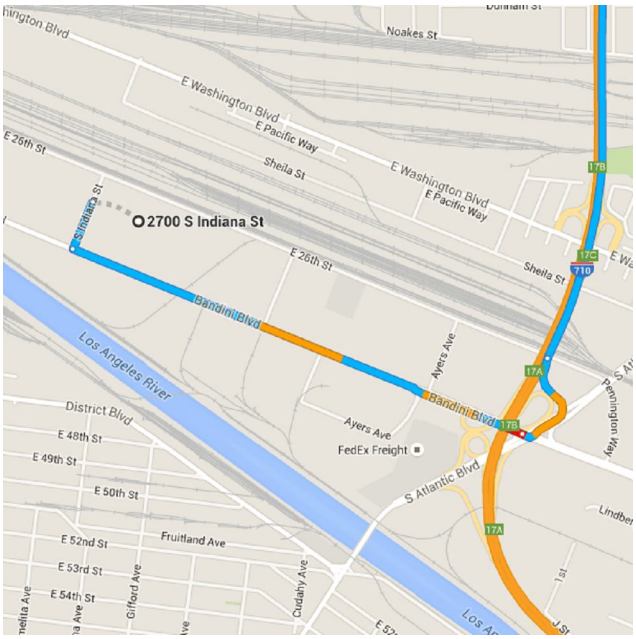
   0.1 mi

2. Turn left onto Bandini Blvd

   1.1 mi

3. Turn left to merge onto I-710 N/Long Beach Fwy

   0.3 mi



Take I-40 E and I-44 E to I-44BUS E/Kingshighway in Rolla. Take exit 184 from I-44 E

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1,722 mi / 24 h

4. Merge onto I-710 N/Long Beach Fwy
1.9 mi

5. Use the right 2 lanes to take exit 20A to merge onto CA-60 E/Pomona Fwy toward Pomona
8.6 mi

6. Keep left to continue on CA-60 E
13.6 mi

7. Keep left at the fork to stay on CA-60 E, follow signs for Pomona/Riverside
15.2 mi

8. Use the right 2 lanes to take exit 41 to merge onto I-15 N toward N Barstow
9.3 mi

9. Keep left to stay on I-15 N
67.1 mi

10. Keep right at the fork to continue on I-40 E, follow signs for Needles
Passing through Arizona
Entering New Mexico
674 mi

11. Keep left to stay on I-40 E
Passing through Texas
Entering Oklahoma
527 mi

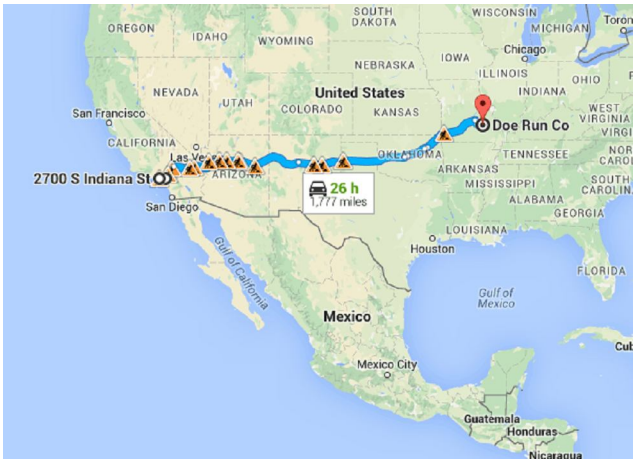
12. Take exit 139 for John Kilpatrick Turnpike
0.8 mi

13. Keep right at the fork to stay on Exit 139, follow signs for Kilpatrick Turnpike E and merge onto John Kilpatrick Turnpike
Partial toll road
25.0 mi

14. Continue onto I-44 E
Partial toll road
87.8 mi

15. Use the right 2 lanes to take the Interstate 44 E/Oklahoma 66 E exit toward Joplin
0.3 mi

16. Continue onto I-44 E
18.2 mi



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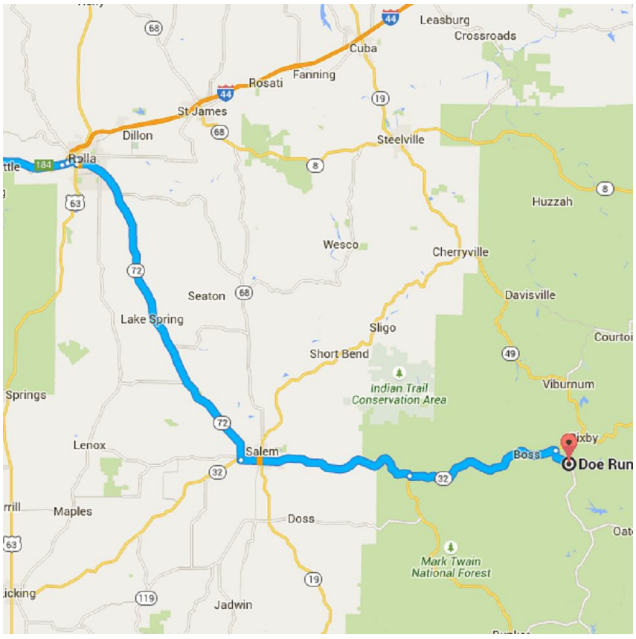
17. Use the right 2 lanes to take the I-44 E exit toward Joplin/Turnpike
    Toll road
    1.1 mi

18. Continue onto I-44 E
    Partial toll road
    Entering Missouri
    272 mi

19. Take exit 184 for I-44 BUS E toward US-63 S/Rolla
    0.4 mi

Follow MO-72 E and MO-32 E to State Hwy KK in Dent

54.2 mi / 1 h 5 min



20. Turn right onto I-44BUS E/Kingshighway
    0.7 mi

21. Turn right onto N Bishop Ave
    0.3 mi

22. Use the left 2 lanes to turn left onto MO-72 E
    25.8 mi

23. Turn left onto MO-32 E/MO-72 E
    13.7 mi

24. Slight left onto MO-32 E
    12.2 mi

25. Turn right onto State Hwy KK
    Destination will be on the left
    1.5 mi

Doe Run Co

18594 State Highway KK, Boss, MO 65440

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

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ATTACHMENT I

Prepared date: **April 17, 2015**
Prepared by: Dan Henke 765.808.4862

SCAQMD Notification#: **Date & Time:** 4/17/2015 8:00 am

Exide Recycling Facility – Vernon, CA.
Date of submittal: April 17, 2015

~~**Revision: 4/26/15 11:00 AM Dan Henke**~~
~~**Revision: 4/27/15 8:00 AM Dan Henke**~~
~~**Revision: 5/20/15 9:20 PM Dan Henke**~~
Revision: 5/31/15 8:30 PM Dan Henke

Under Section 6 (Other Maintenance and Specific Mitigation Measures) subpart b. of the Mitigation plan

---

Shipments of the Reverb Slag and Cast Iron shall begin on June 1, 2015 and completed by June 30, 2015. The trucks shipping rate will be approximately 6 to 12 truck loads per day Monday through Friday (typically 6:00 AM – 5:00 PM).

Removal & Shipment of Blast Furnace Feed [Ex-97] – Reverb Slag & Cast Iron

Description of Work:

The Blast Furnace Feed Room has material stockpiled in it that must be removed. These are Reverb Slag, Mix of Refinery Drosses & Plates, Blast Slag, Refinery Drosses, Cast Iron, Lime Rock and Coke (see table below). All these materials except for the Refinery (Tin & Antimony) Drosses are going to be loaded into lined, leak proof / end dump trailers for removal. The shipment destination of the Mix of Refinery Drosses & Plates has not been determined at this time and will not be discussed in this plan. The Refinery (Tin & Antimony) Drosses shall be removed by loading into 30 gallon DOT approved drums (see Mitigation Plan EX-100). This mitigation plan is only discussing the Reverb Slag and Cast Iron material being loaded and shipped into lined, burrito wrapped, tarp covered, leak proof / end dump trailers.

Material	Quantity (lbs)	Classification	Waste Code	Receiving Facility	Method	Number of Trucks	Note
Dross & Plates - Blast Feed	2,520,000	RCRA Hazardous Waste	D006, D008	TBD	Recycling	60	From Refining Kettles, lead plates
Reverb Slag	1,512,000	RCRA Hazardous Waste	D006, D008	Muncie	Recycling	36	From Reverb furnace
Tin Dross (Sn)	798,000	RCRA Hazardous Waste	D008	TBD	Recycling	19	From Refining pots - to be recycled
Cast Iron	499,408	RCRA Hazardous Waste	D008	Muncie	Recycling	12	To be recycled - contaminated
Antimony Dross (Tn)	346,500	RCRA Hazardous Waste	D008	TBD	Recycling	8	From Refining pots - to be recycled
Lime Rock	70,560	RCRA Hazardous Waste	D008	US Ecology	Disposal	2	Disposal
Blast Coke (Floor)	38,448	RCRA Hazardous Waste	D008	US Ecology.	Disposal	2	Disposal
Blast Slag	1,000	Existing Profile		US Ecology.	Disposal		Goes to La Paz for disposal
						139	

This project entails loading Reverb Slag and Cast Iron materials stored in the Blast Furnace Feed Room into lined, burrito wrapped, tarp covered, leak proof / "end dump" trailers, decontaminating the "end dump" trailers and shipping the decontaminated "end dump" trailers to an off-site processing location (just as was used for the Reverb Feed material in Mitigation Plan EX-92). The off-site facility shall be a processing site with the appropriate RCRA certification. The Reverb Slag and Cast Iron shall be shipped to the Exide Muncie Indiana recycling center. See map to Muncie, IN at the end of the plan. The other fluxing agents shall be shipped to a hazardous landfill (US Ecology in Beatty, NV). The shipment manifests shall have the requisite credentials of the receiving location. The loading and decontamination shall occur according to the DTSC approved procedures in the corridor portion of the

Total Enclosure Building which is under negative pressure and is vented to SCAQMD permitted air pollution control equipment equipped with HEPA filters which is in full operation. The Blast Furnace Feed, including but not limited to the Reverb Slag and Cast Iron, is located in the Blast Furnace Feed Room located at the southeastern area of the Total Enclosure Building.

Characteristics, quantities and mitigation measures utilized during this work are detailed below.

Characteristics / Quantities:

Blast Feed Materials:
- Reverb Slag … waste material from the Reverb Furnace
  - RCRA Hazardous classification
  - Size range – ¼ inch to 10 inch, typical
  - Quantity – approx. 1,512,000 lbs (approx. 36 trucks)
- Fluxing Agents … chemical additives/fuels for Blast Furnace
  - RCRA Hazardous classification due to being stockpiled in Blast Feed Room
  - Size range – ¼ inch to 10 inch, typical
  - Quantity of each:
    - Lime Rock - approx. 70,500 lbs (approx. 2 trucks)
    - Blast Coke - approx. 38,500 lbs (approx. 2 trucks)
    - Cast Iron - approx. 500,000 lbs (approx. 12 trucks)

Specific Mitigation Measures:

- Each end dump trailer shall be first inspected and examined to ensure there are no cracks or holes in the container prior to lining the containers in preparation for loading of the trailers. This inspection shall be noted on the pre-loading checklist (see attached Pre-Loading checklist).
- The end dump trailers are a leak-proof design and after inspection for cracks or holes in the container shall be lined at Exide with a single 6-mil poly propylene liner prior to loading any material to enhance the existing gasketed rear door.
- The 6-mil poly propylene liner shall be of such a dimension in length and width in order to make a “burrito” type enclosure after loading the material using industrial type duct tape. This procedure mimics that used to transport material containing asbestos.
- The rib structure on top of the end dump trailers shall be rotated out of the way prior to lining, loading and completion of the burrito wrap. The rib structure shall then be rotated back into position for clean up and securely covering the trailer with tarp material.
- The material shall be carefully loaded with front end loaders into lined leak proof / end dump trailers in a manner to prevent or minimize any fugitive dust generation during the loading operation. The use of water sprays on dusty stockpile material shall be utilized to minimize or prevent fugitive dust generation during loading. Also, water, misting sprays shall be utilized at the loading point of the end dump trailers while the material is transferred into the trailers.
- The rib structure above the end dump trailer and the top edges of the trailer shall be completely wiped clean with wet cloth after completion of loading of the material into the trailer in order to remove any dust or debris collected on the ribs structure or top edges during the loading operation.
- After cleaning of the rib structure and top edges of the trailer, the outside of the trailer will be pressure washed to remove any dust or debris from the loading operations and all rinse/wash water will be directed to proper drains and the appropriate waste water treatment system.
- Each end dump trailer shall be securely covered with a tarp system in a manner to cover all gaps and to provide for a sealed trailer during removal and shipment.
- The tarped trailer and truck shall be first inspected to ensure that there are no gaps or tears and that the container is fully secured and sealed and then pressure washed with city water to

remove exterior dust from the trailer, tarp and truck and all rinse/wash water will be directed to proper drains and the appropriate waste water treatment system.

- All of the above activities shall be conducted in the corridor section (with the door to the corridor closed during loading and decontamination, and will be opened only during entry and exit) inside the Total Enclosure Building which is under negative pressure and which is vented to air pollution control system which is permitted by SCAQMD and is in full operation and is equipped with HEPA filtration.
- Exide will inspect the truck and trailer for adequacy of decontamination and complete a Decon Checklist (see attached Decon checklist).
- Trucks used for off-site shipments of this material shall go through the SCAQMD permitted truck wash system before leaving the facility. The trucks with the end dump trailers shall not be stored at the facility. Exide shall maintain records of washed trucks on the Truck Wash Log/Spread Sheet and records maintained inside the Bandini Street guard station, or other appropriate location at Exide, and made available to SCAQMD staff, upon request.
- Exide shall comply with all applicable requirements of SCAQMD Rules, Regulations, Compliance Plans and Mitigation Plans, as well as all applicable rules and regulations and requirements of other agencies, such as DTSC, DOT, etc., related to removal, transport and shipment of this material.
- The transport trucks shall be dry and not dripping water from the trailer prior to leaving the plant so that there is no uncertainty regarding existence of any leaks vs. dripping of water from the truck wash system, to prevent the dripping of liquid hazardous waste during offsite transport.

Attachment H Map
from vernon to Munci

Hazardous Materials Route Summary
Vernon,CA to Muncie,IN

Origin:	Vernon,CA
Destination:	Muncie,IN
Driving Distance:	2144.0 miles
Driving Time:	35:02
Route Type:	53 ft. MileMaker Practical Route
Locations:	Flagstaff,AZ
	Oklahoma Cy,OK

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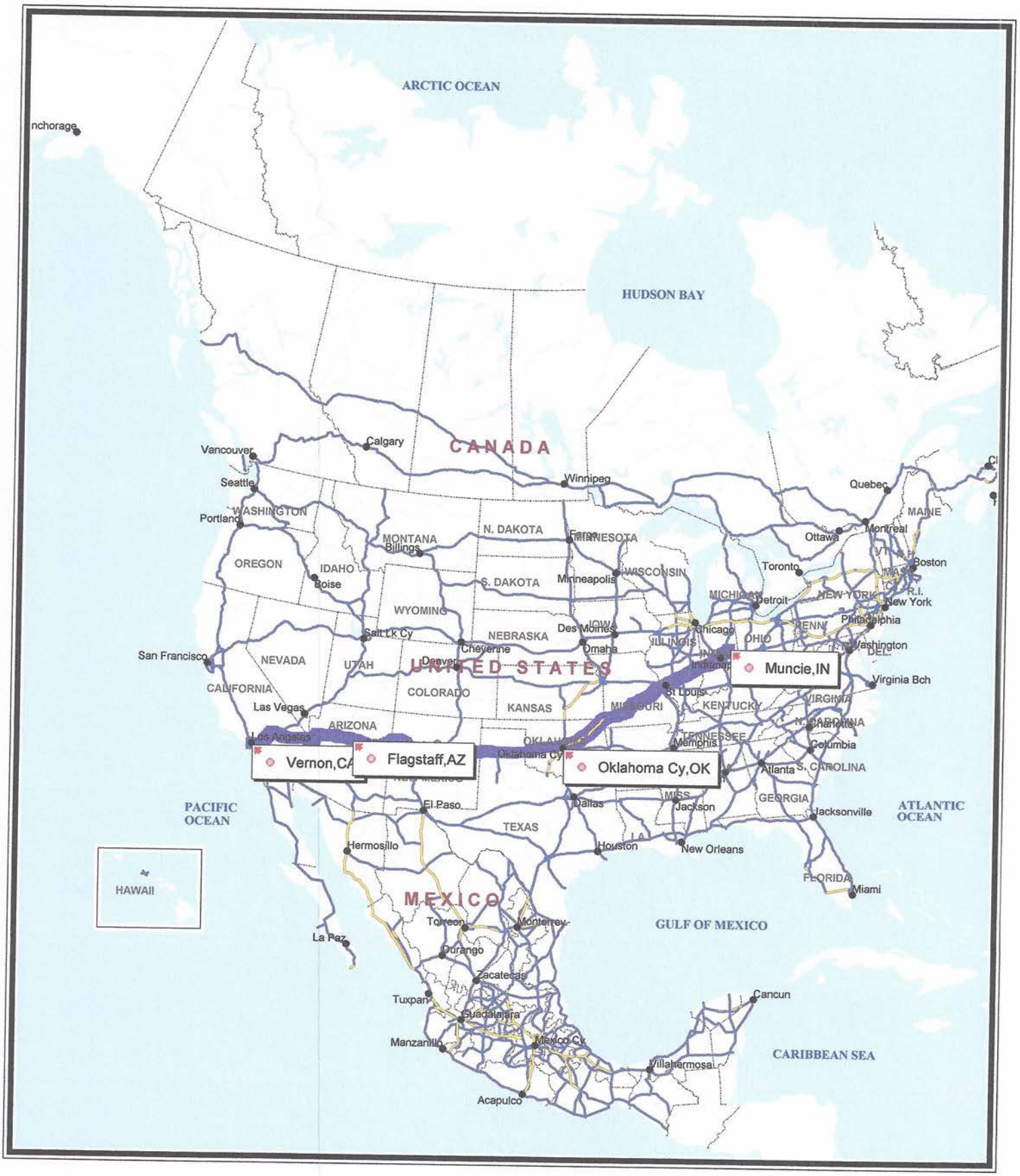
Hazardous Materials Overview Map
Vernon,CA to Muncie,IN



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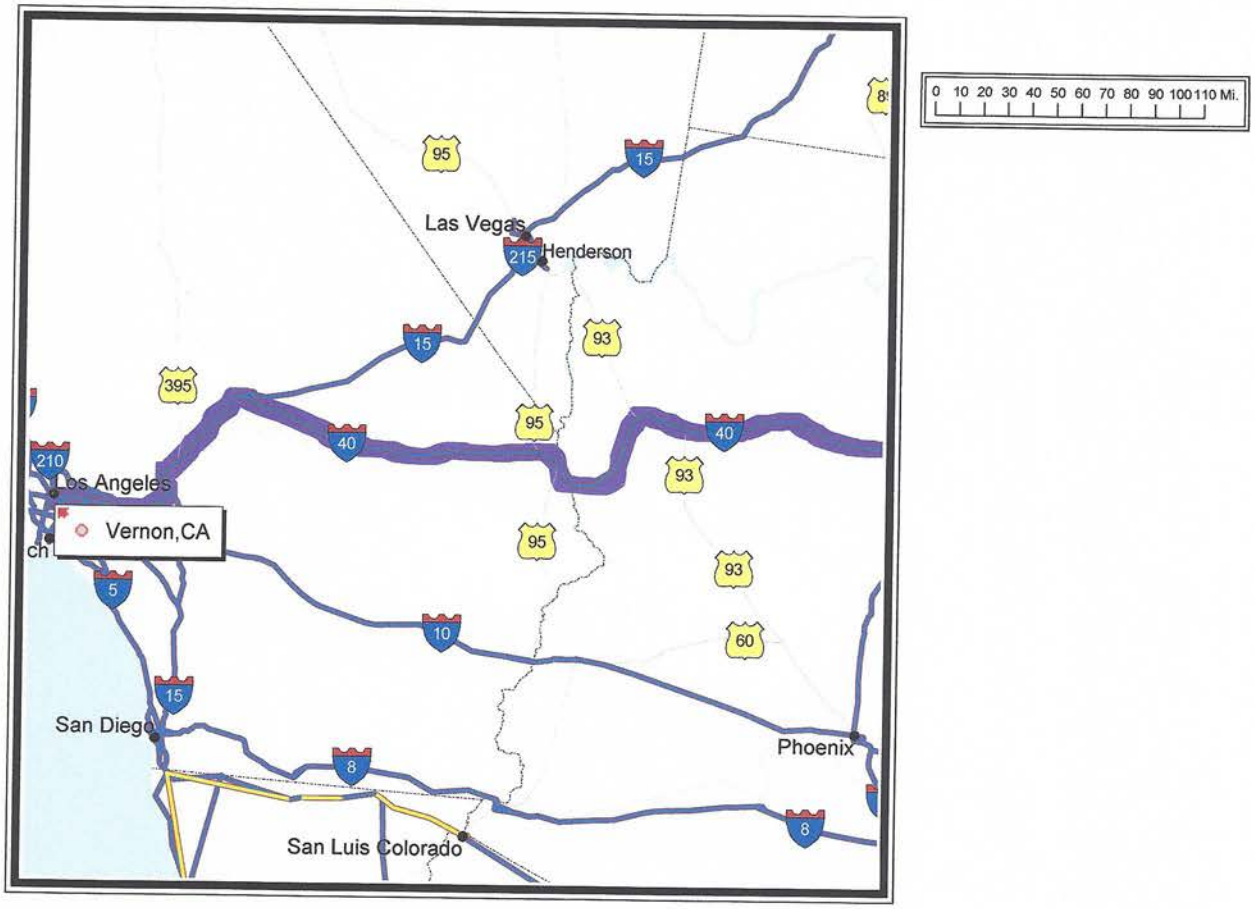
ALAMEDA ST
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
ALAMEDA ST	N	3	SE OF LOS ANGELES,CA	0:15	3		p.14-15,SJ-11
US 101	E	1	SE OF LOS ANGELES,CA	0:16	4		p.14-15,SJ-11
SN BERDINO FRWY	E	40	NW OF MIRA LOMA,CA	1:03	44		p.14-15,SJ-13
I 15	N	73	SE OF BARSTOW,CA	2:21	118		p.14-15,SH-14
I 40	E	155	CA/AZ STATE LINE	5:02	273		p.8-9,G-2
I 40	E	195	FLAGSTAFF,AZ	8:02	467	VIA	p.8-9,F-8

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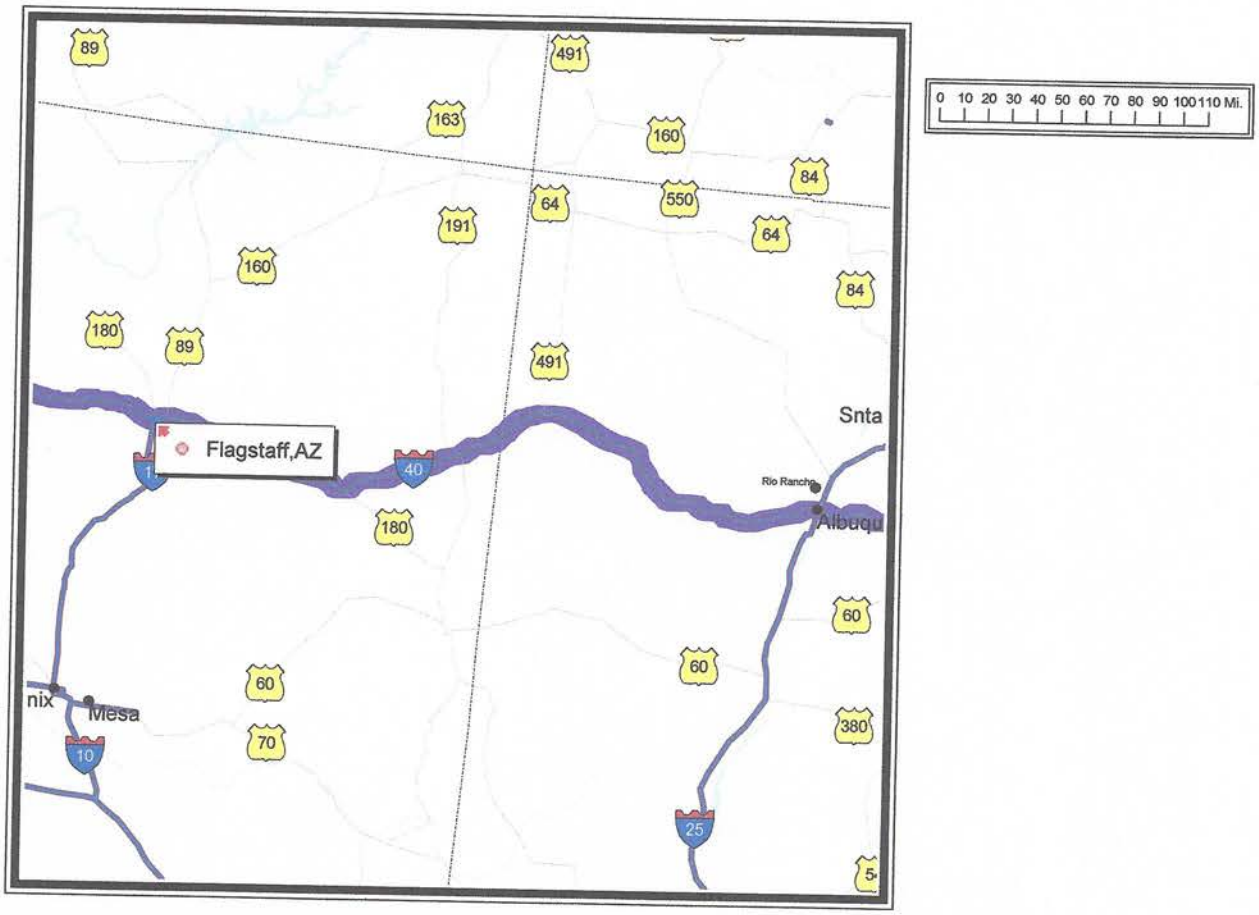
I 40
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	195	FLAGSTAFF,AZ	8:02	467	VIA	p.8-9,F-8
I 40	E	164	AZ/NM STATE LINE	10:35	632		p.8-9,E-14
I 40	E	373	NM/TX STATE LINE	16:22	1005		p.98-99,WD-8

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I 40
Vernon,CA to Muncie,IN

Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	373	NM/TX STATE LINE	16:22	1005		p.98-99,WD-8
I 40	E	177	TX/OK STATE LINE	19:14	1182		p.82-83,G-7

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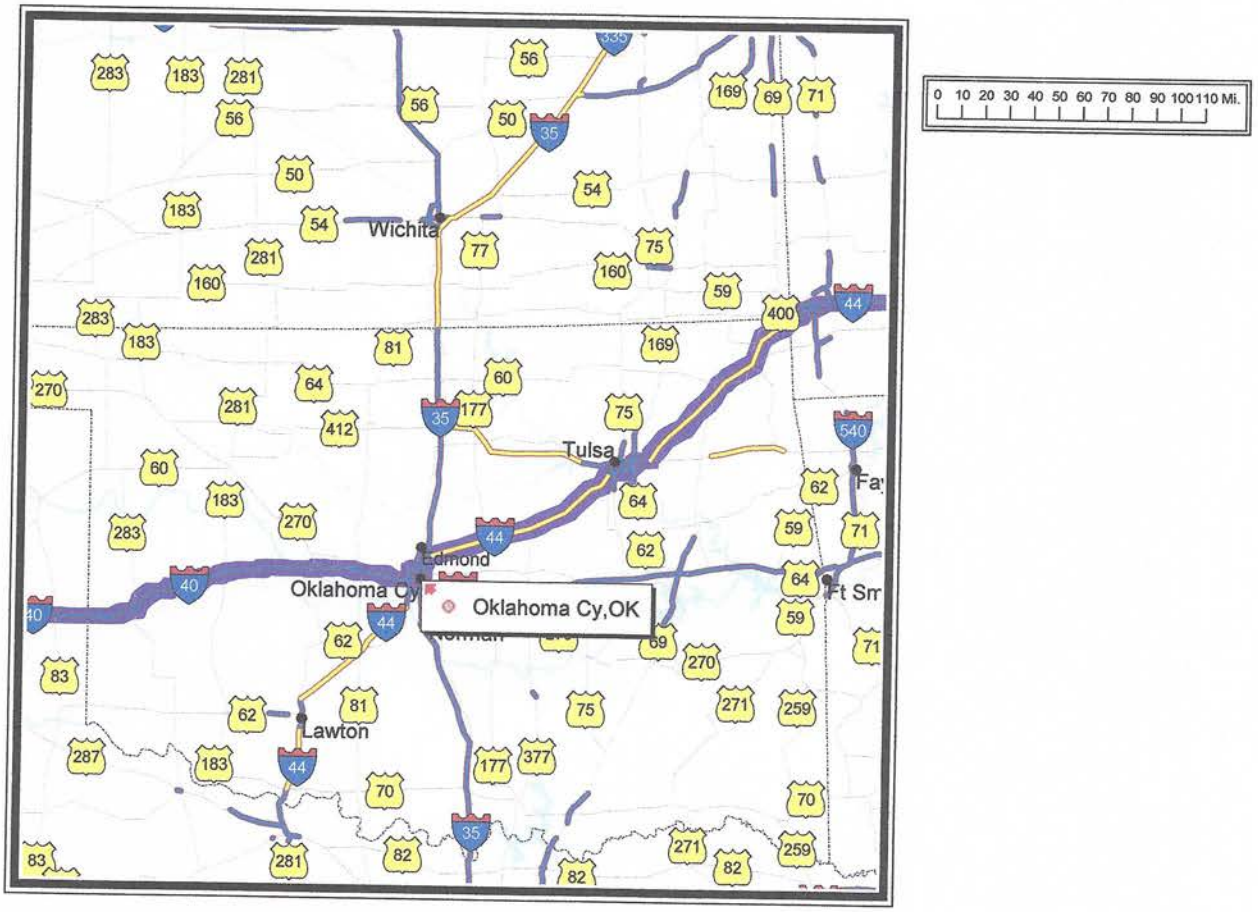
I 40
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	177	TX/OK STATE LINE	19:14	1182		p.82-83,G-7
I 40	E	147	W OF OKLAHOMA CY,OK	21:34	1329		p.82-83,F-13
I 44	E	8	N OF OKLAHOMA CY,OK	21:42	1337		p.82-83,F-13
I 235	S	5	OKLAHOMA CY,OK	21:47	1342	VIA	p.82-83,F-13
I 35	N	11	SW OF ARCADIA,OK	21:58	1353		p.82-83,F-13
I 44	E	195	OK/MO STATE LINE	25:00	1547	TL	p.40-41,J-19
I 44	E	290	ST LOUIS,MO	29:30	1838		p.58-59,G-18

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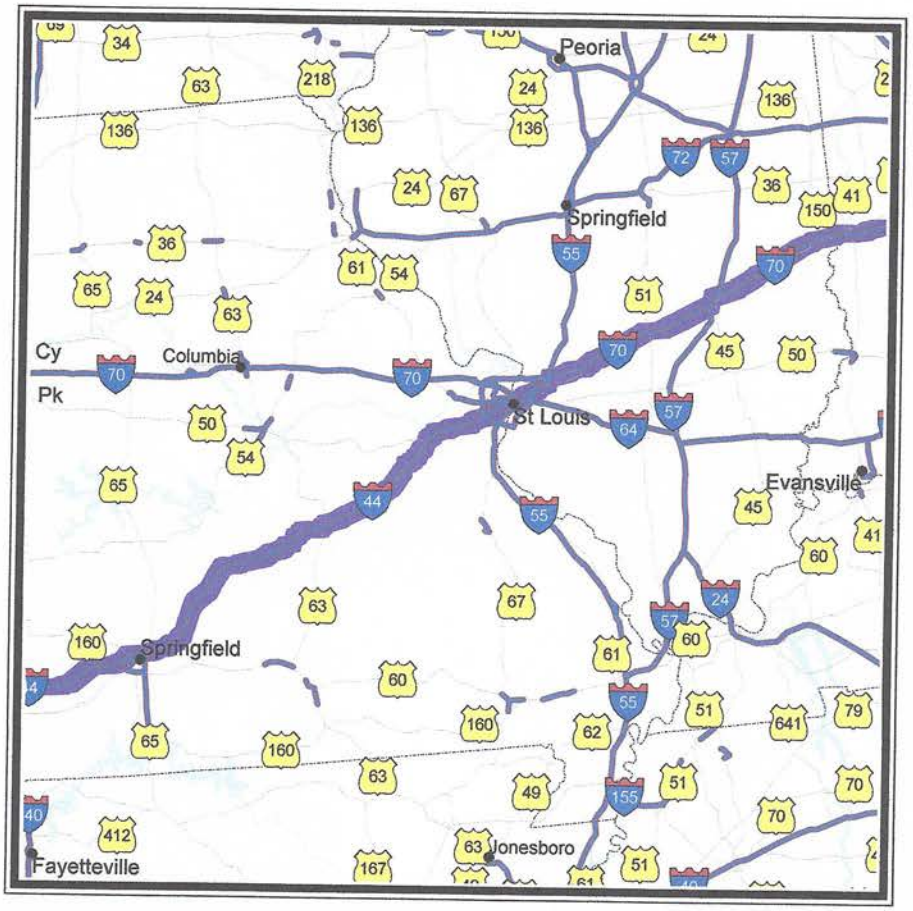
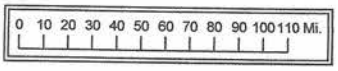
I 44
Vernon,CA to Muncie,IN





Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 44	E	290	ST LOUIS,MO	29:30	1838		p.58-59,G-18
I 55	N	2	MO/IL STATE LINE	29:32	1839	BR	p.58-59,G-18
I 55	N	19	NW OF TROY,IL	29:53	1859	BR	p.32-33,N-7
I 70	E	141	IL/IN STATE LINE	32:19	2000		p.32-33,L-13
I 70	E	73	W OF INDIANAPOLIS,IN	33:35	2073		p.36-37,K-8

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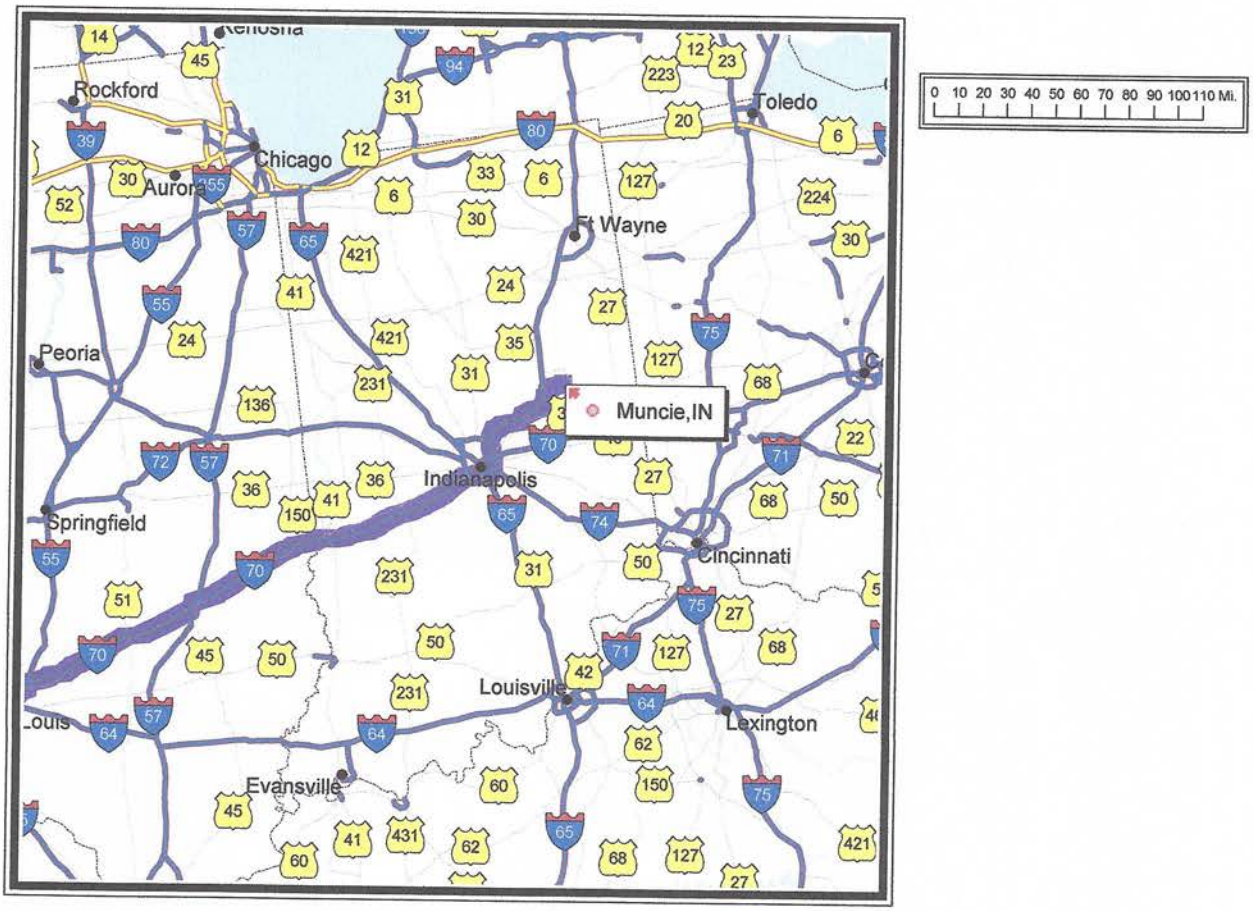
I 70
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 70	E	73	W OF INDIANAPOLIS,IN	33:35	2073		p.36-37,K-8
I 465	E	26	NE OF INDIANAPOLIS,IN	34:04	2098		p.36-37,J-9
I 69	N	34	SW OF DALEVILLE,IN	34:41	2132		p.36-37,I-11
IN 32	E	12	MUNCIE,IN	35:02	2144		p.36-37,H-12

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mapquest

Notes

Trip to:

Exide Technologies
2601 W Mt Pleasant Blvd
Muncie, IN 47302
(765) 747-9980
2129.65 miles / 32 hours 36 minutes

Exide Technologies
2700 S Indiana St, Vernon, CA 90058
(323) 262-1101

Download Free App

1. Start out going **south** on **S Indiana St** toward **Bandini Blvd.** Map	**0.05 Mi** *0.05 Mi Total*
2. Turn **left** onto **Bandini Blvd.** Map	**1.2 Mi** *1.2 Mi Total*
3. Merge onto **I-710 N / Long Beach Fwy N** via the ramp on the **left.** Map	**2.1 Mi** *3.3 Mi Total*
4. Merge onto **CA-60 E / Pomona Fwy E** via **EXIT 20A** toward **Pomona.** Map	**8.7 Mi** *11.9 Mi Total*
5. Merge onto **I-605 N / San Gabriel River Fwy N** via **EXIT 12.** Map	**8.2 Mi** *20.2 Mi Total*
6. Merge onto **I-210 E / Foothill Fwy E** via **EXIT 27A** toward **San Bernardino.** Map	**8.7 Mi** *28.9 Mi Total*
7. **I-210 E / Foothill Fwy E** becomes **CA-210 E / Foothill Fwy E.** Map	**18.1 Mi** *47.0 Mi Total*
8. Merge onto **I-15 N** via **EXIT 64A** toward **Barstow.** Map	**67.5 Mi** *114.5 Mi Total*
9. Keep **right** to take **I-40 E** via **EXIT 184A** toward **Needles** (Passing through **Arizona**, **New Mexico** and **Texas**, then crossing into **Oklahoma**). Map	**1202.6 Mi** *1317.1 Mi Total*
10. Take the **Kilpatrick Turnpike** exit, **EXIT 139.** Map	**0.8 Mi** *1317.9 Mi Total*
11. Keep **right** at the fork in the ramp. Map	**0.4 Mi** *1318.4 Mi Total*
12. Merge onto **John Kilpatrick Turnpike E** (Portions toll). Map	**25.2 Mi** *1343.6 Mi Total*
13. **John Kilpatrick Turnpike E** becomes **I-44 E** (Portions toll). Map	**87.3 Mi** *1430.9 Mi Total*

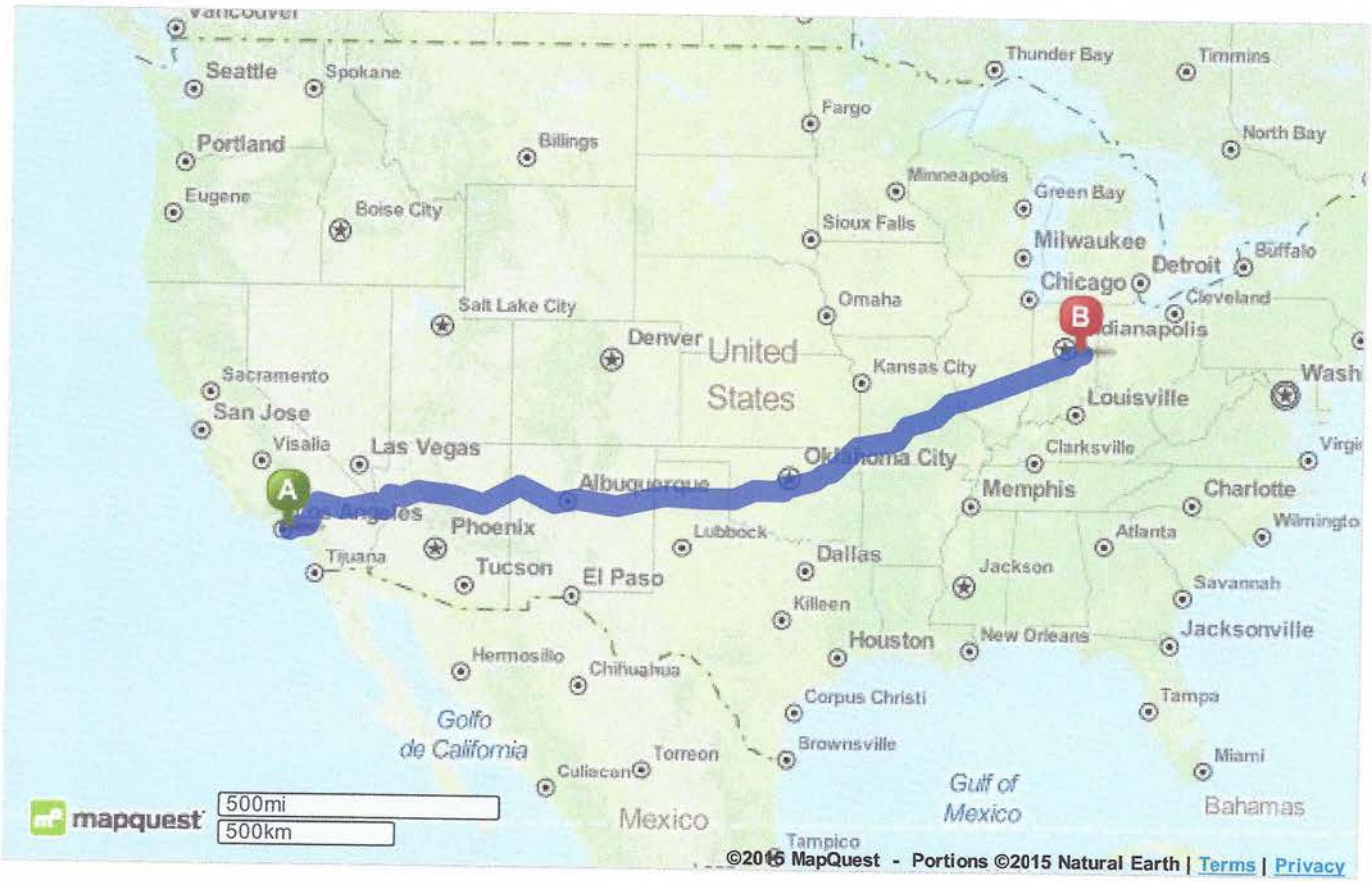
EAST 44

	14. Keep **right** to take **I-44 E** toward **Joplin** (Portions toll) (Crossing into **Missouri**). Map	**398.3 Mi** *1829.2 Mi Total*
	15. Merge onto **I-55 N / I-64 E / US-40 E** via **EXIT 291A** toward **I-70 E / Illinois** (Crossing into **Illinois**). Map	**3.1 Mi** *1832.2 Mi Total*
	16. Keep **left** to take **I-55 N** toward **Great River Road N / Chicago / Indianapolis**. Map	**16.2 Mi** *1848.4 Mi Total*
	17. Merge onto **I-70 E** via **EXIT 20A** toward **Indianapolis** (Crossing into **Indiana**). Map	**223.9 Mi** *2072.4 Mi Total*
	18. Keep **right** to take **I-70 E** via **EXIT 112A** toward **Columbus OH**. Map	**5.7 Mi** *2078.0 Mi Total*
	19. Take the **I-465 / IN-37 N / US-421 N / I-70 E / IN-37 S / US-36 / US-421 S** exit, **EXIT 89**. Map	**0.9 Mi** *2078.9 Mi Total*
	20. Merge onto **I-465 N / US-31 N / US-52 W / US-421 N / IN-37 N / USS Indianapolis Memorial Hwy N**. Map	**7.1 Mi** *2086.0 Mi Total*
	21. Merge onto **I-69 N** via **EXIT 37** toward **Ft Wayne**. Map	**33.5 Mi** *2119.5 Mi Total*
	22. Take the **IN-67 N / IN-32** exit, **EXIT 234**, toward **Anderson / Muncie**. Map	**0.4 Mi** *2119.9 Mi Total*
	23. Turn **right** onto **W Commerce Rd / IN-67 / County Hwy-550**. Continue to follow **IN-67**. Map	**7.7 Mi** *2127.6 Mi Total*
	24. Take the ramp toward **Hoyt Ave**. Map	**0.3 Mi** *2127.9 Mi Total*
	25. Merge onto **S Old State Road 67**. Map	**0.3 Mi** *2128.2 Mi Total*
	26. Stay **straight** to go onto **S Old State Highway 67**. Map	**0.05 Mi** *2128.3 Mi Total*
	27. **S Old State Highway 67** becomes **S Old State Road 67**. Map	**0.09 Mi** *2128.4 Mi Total*
	28. Turn **slight left** onto **S Hoyt Ave**. Map	**0.9 Mi** *2129.3 Mi Total*
	29. Take the 2nd **right** onto **W Mt Pleasant Blvd**. Map	**0.4 Mi** *2129.6 Mi Total*
	30. **2601 W MT PLEASANT BLVD** is on the **right**. Map	

Exide Technologies

2601 W Mt Pleasant Blvd, Muncie, IN 47302
(765) 747-9980

Total Travel Estimate: **2129.65 miles - about 32 hours 36 minutes**



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Prepared date: **May 20, 2015**
Prepared by: Dan Henke 765.808.4862

SCAQMD Notification#: **Date & Time:** 5/21/2015 11:00 AM

Exide Recycling Facility – Vernon, CA.
Date of submittal: May 19, 2015

~~**Revision: 5/20/15 9:00 PM Dan Henke**~~
Revision: 5/31/15 8:00 PM Dan Henke

Under Section 6 (Other Maintenance and Specific Mitigation Measures) subpart b. of the Mitigation plan

---

Removal of the Tin and Antimony Drosses shall begin on June 1, 2015 and completed by June 30, 2015.
Tin and Antimony Drosses shall be loaded into 30-gallon drums inside the Blast Feed Room and transported to Container Storage Area Units 1, 2 and 3 for staging until final shipping arrangements are set. To meet the timeline for removal of this material the drums shall be loaded Monday – Friday from 5:00 PM – 5:00 AM.

Removal & Shipment of Blast Furnace Feed [EX-100] – Tin & Antimony Drosses

Description of Work:

The Blast Feed Room has material stockpiled in it that must be removed. These are Reverb Slag, Mix of Refinery Drosses & Plates, Blast Slag, Tin Dross, Antimony dross, Cast Iron, Lime Rock and Coke. All these materials except for the Tin and Antimony Drosses are going to be loaded into lined, burrito wrapped, tarp covered, leak proof / end dump trailers for removal.

Material	Quantity (lbs)	Classification	Waste Code	Receiving Facility	Method	Number of Trucks	Note
Dross & Plates - Blast Feed	2,520,000	RCRA Hazardous Waste	D006, D008	TBD	Recycling	60	From Refining Kettles, lead plates
Reverb Slag	1,512,000	RCRA Hazardous Waste	D006, D008	Muncie	Recycling	36	From Reverb furnace
Tin Dross (Sn)	798,000	RCRA Hazardous Waste	D008	TBD	Recycling	19	From Refining pots - to be recycled
Cast Iron	499,408	RCRA Hazardous Waste	D008	Muncie	Recycling	12	To be recycled - contaminated
Antimony Dross (Tn)	346,500	RCRA Hazardous Waste	D008	TBD	Recycling	8	From Refining pots - to be recycled
Lime Rock	70,560	RCRA Hazardous Waste	D008	US Ecology	Disposal	2	Disposal
Blast Coke (Floor)	38,448	RCRA Hazardous Waste	D008	US Ecology.	Disposal	2	Disposal
Blast Slag	1,000	Existing Profile		US Ecology.	Disposal		Goes to La Paz for disposal
						139	

The shipment destination of the "Dross & Plates" has not been determined at this time and will not be discussed in this plan. The Reverb Slag and Cast Iron shall be removed by shipping the material via leak proof / end dump trailers (see Mitigation Plan EX-97). This mitigation plan is only discussing the Tin and Antimony Dross material being removed in 30-gallon DOT approved drums.

This project entails loading the Tin and Antimony Dross material into the brand new purchased 30-gallon DOT approved drums. The drums shall be positioned in the Blast Feed Room at the Dross stockpile just prior to filling and filled manually with shovels in a manner that minimizes the release of any fugitive dust. The material shall be slowly lowered into the drum with the shovel and not dumped from the top of the drum to minimize the release of the finer particulate material. A manual controlled misting sprayer shall be used to keep the material moist to further minimize the release of fine particulate matter during loading of this material into the drums. The loading of each drum should take approximately 15 minutes from time the drum is placed at the stockpile to when the drum lid is sealed. Some other specific mitigation measures not mentioned here and detailed bullets below shall be also implemented to minimize fugitive emissions. After the drum is sealed at the stockpile loading point, the drum shall be taken to the Finished Goods Shipping area and the drum will be cleaned (details on methods to keep drum clean and decontaminated are in mitigation measures below) and palletized. Each drum shall have the appropriate labels attached for identification and to meet hazardous

classifications requirements. A drum inventory shall be maintained for the purpose of documenting each drum and its location throughout its transportation while at the plant and during shipment to its final destination. Each pallet shall have 4 decontaminated drums placed on it and then banded to secure the drums on the pallet.

After the palletizing is complete the pallets shall be transported to the outside Container Storage Area Units 1, 2 and 3 in the South Yard of the plant (see attached map of the facility and the traffic of the drums). Once the final destination of the Tin and Antimony Dross material has been selected, the pallets shall be loaded onto van trailers at the Blue Lead MRO Warehouse dock in the West Yard of the facility. The trailer shall then be taken through the West Yard truck wheel wash unit, scaled and dispatched through the Bandini Boulevard scale house / gate.

Characteristics, quantities and mitigation measures utilized during this work are detailed below.

Characteristics / Quantities:

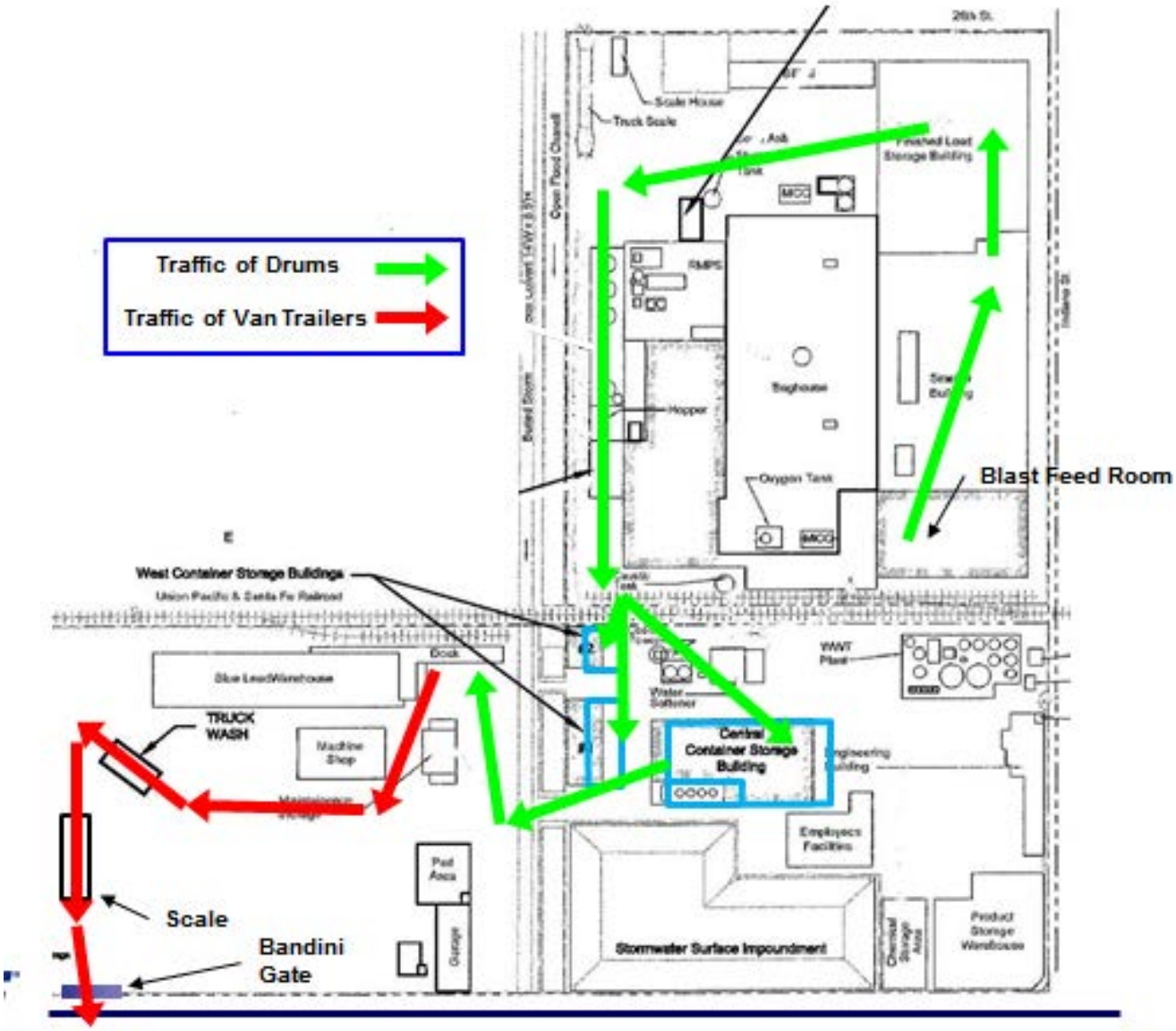
Blast Feed Materials:
Tin & Antimony Drosses RCRA Hazardous classification
Size range – ¼ inch to 5 inch, typical
Quantity – approx. 1,145,000 lbs (approx. 1,430 drums)

Specific Mitigation Measures:

- Each drum shall be first inspected and examined to ensure there are no cracks or leaks in the drum prior to taking the drum into the Blast Feed Room.
- The material shall be carefully loaded **manually** with shovels into 30-gallon drums in a manner to prevent or minimize any fugitive dust generation by slowly lowering the shovel into the drum instead of dumping the material into the drum at the top of the drum opening.
- A manually operated water misting sprayer shall be used to wet the material prior to being picked up with the shovel in order to keep the material moist and to minimize or prevent fugitive dust emissions.
- A plastic wrap (either a bag or shrink wrap) shall be placed over the outer sides and bottom of the drum and overlapped the open top of the drum prior to taking the drum into the Blast Feed Room. This outer plastic wrap shall keep any dusty material from the feed room stockpile area from being exposed to the drum. The plastic wrap shall be taken off the drum at the exiting of the Blast Feed Room prior to the drum being transported to the Finished Goods Shipping area. The plastic wrap shall be disposed of in the covered roll-off containers inside the Total Enclosure Building that is being used for all the materials that are sent to the hazardous landfill.
- The loaded drum, after the plastic outer protective wrap is removed, shall be decontaminated by vacuuming the entire drum's exterior with a SCAQMD permitted vacuum equipped with HEPA filters prior to being palletized.
- The loading of the Tin and Antimony Drosses into the drums shall only occur in the Blast Feed Room which is contained inside the Total Enclosure Building which is under negative pressure and which is vented to the Material Handling air pollution control system which is permitted by SCAQMD and is in full operation and is equipped with HEPA filtration.
- After the palletized drums are staged in Container Storage Area Units 1, 2 &3 and shipment plans set, the pallets shall be loaded onto van trailers. The trailers shall go through the SCAQMD permitted truck wash system before leaving the facility. Exide shall maintain records of washed trucks on the Truck Wash Log/Spread Sheet and records maintained inside the Bandini Street guard station, or other appropriate location at Exide, and made available to SCAQMD staff, upon request.
- Exide shall comply with all applicable requirements of SCAQMD Rules and Regulations, Compliance Plans and approved Mitigation plans, as well as all applicable rules, regulations and

requirements of other agencies, such as DTSC, DOT, etc., related to removal, transport and shipment of this material.

Map of facility with the traffic pattern of the Refinery Dross palletized drums



Prepared date: **June 1, 2015**
Prepared by: Dan Henke 765.808.4862

SCAQMD Notification#: **Date & Time:** 06/01/2015 4:00 pm

Exide Recycling Facility – Vernon, CA.
Date of submittal: June 1, 2015

Under Section 6 (Other Maintenance and Specific Mitigation Measures) subpart b. of the Mitigation plan

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Shipments of the Lime Rock and Blast Coke shall begin on June 8, 2015 and completed by June 19, 2015. There are 4 to 5 trucks and shall be shipped Monday through Friday (typically 6:00 AM – 2:00 PM).

Removal & Shipment of Blast Furnace Feed [Ex-102] – Lime Rock & Blast Coke

Description of Work:

The Blast Furnace Feed Room has material stockpiled in it that must be removed. These are Reverb Slag, Mix of Refinery Drosses & Plates, Blast Slag, Refinery Drosses, Cast Iron, Lime Rock and Blast Coke (see table below). All these materials except for the Refinery (Tin & Antimony) Drosses are going to be loaded into lined, leak proof / end dump trailers for removal. The shipment destination of the Mix of Refinery Drosses & Plates has not been determined at this time and will not be discussed in this plan. The Refinery (Tin & Antimony) Drosses shall be removed by loading into 30 gallon DOT approved drums (see Mitigation Plan EX-100). The Reverb Slag and Cast Iron shall be removed by being loaded and shipped into lined, burrito wrapped, tarp covered, leak proof / end dump trailers (see Mitigation Plan EX-97). This mitigation plan is only discussing the Lime Rock and Blast Coke and it also shall be loaded and shipped into lined, burrito wrapped, tarp covered, leak proof / end dump trailers.

Material	Quantity (lbs)	Classification	Waste Code	Receiving Facility	Method	Number of Trucks	Note
Dross & Plates - Blast Feed	2,520,000	RCRA Hazardous Waste	D006, D008	TBD	Recycling	60	From Refining Kettles, lead plates
Reverb Slag	1,512,000	RCRA Hazardous Waste	D006, D008	Muncie	Recycling	36	From Reverb furnace
Tin Dross (Sn)	798,000	RCRA Hazardous Waste	D008	TBD	Recycling	19	From Refining pots - to be recycled
Cast Iron	499,408	RCRA Hazardous Waste	D008	Muncie	Recycling	12	To be recycled - contaminated
Antimony Dross (Tn)	346,500	RCRA Hazardous Waste	D008	TBD	Recycling	8	From Refining pots - to be recycled
Lime Rock	70,560	RCRA Hazardous Waste	D008	US Ecology	Disposal	2	Disposal
Blast Coke (Floor)	38,448	RCRA Hazardous Waste	D008	US Ecology.	Disposal	2	Disposal
Blast Slag	1,000	Existing Profile		US Ecology.	Disposal		Goes to La Paz for disposal
						139	

This project entails loading Lime Rock and Blast Coke materials stored in the Blast Furnace Feed Room into lined, burrito wrapped, tarp covered, leak proof / "end dump" trailers, decontaminating the "end dump" trailers and shipping the decontaminated "end dump" trailers to an off-site processing location (just as was used for the Reverb Feed material in Mitigation Plan EX-92). The off-site facility shall be a processing site with the appropriate RCRA certification. These blast fluxing agents shall be shipped to a hazardous landfill (US Ecology in Beatty, NV). The shipment manifests shall have the requisite credentials of the receiving location. The loading and decontamination shall occur according to the DTSC approved procedures in the corridor portion of the Total Enclosure Building which is under negative pressure and is vented to SCAQMD permitted air pollution control equipment equipped with HEPA filters which is in full operation. The Blast Furnace Feed, including but not limited to the Lime Rock and Blast Coke, is located in the Blast Furnace Feed Room located at the southeastern area of the Total Enclosure Building.

Characteristics, quantities and mitigation measures utilized during this work are detailed below.

Characteristics / Quantities:

Blast Feed Materials:
  Fluxing Agents … chemical additives/fuels for Blast Furnace
    RCRA Hazardous classification due to being stockpiled in Blast Feed Room
    Size range – ¼ inch to 10 inch, typical
    Quantity of each:
      Lime Rock - approx. 70,500 lbs (approx. 2 trucks)
      Blast Coke - approx. 38,500 lbs (approx. 2 trucks)

Specific Mitigation Measures:

- Each end dump trailer shall be first inspected and examined to ensure there are no cracks or holes in the container prior to lining the containers in preparation for loading of the trailers. This inspection shall be noted on the pre-loading checklist (see attached Pre-Loading checklist).
- The end dump trailers are a leak-proof design and after inspection for cracks or holes in the container shall be lined at Exide with a single 6-mil poly propylene liner prior to loading any material to enhance the existing gasketed rear door.
- The 6-mil poly propylene liner shall be of such a dimension in length and width in order to make a “burrito” type enclosure after loading the material using industrial type duct tape. This procedure mimics that used to transport material containing asbestos.
- The rib structure on top of the end dump trailers shall be rotated out of the way prior to lining, loading and completion of the burrito wrap. The rib structure shall then be rotated back into position for clean up and securely covering the trailer with tarp material.
- The material shall be carefully loaded with front end loaders into lined leak proof / end dump trailers in a manner to prevent or minimize any fugitive dust generation during the loading operation. The use of water sprays on dusty stockpile material shall be utilized to minimize or prevent fugitive dust generation during loading. Also, water, misting sprays shall be utilized at the loading point of the end dump trailers while the material is transferred into the trailers.
- The rib structure above the end dump trailer and the top edges of the trailer shall be completely wiped clean with wet cloth after completion of loading of the material into the trailer in order to remove any dust or debris collected on the ribs structure or top edges during the loading operation.
- After cleaning of the rib structure and top edges of the trailer, the outside of the trailer will be pressure washed to remove any dust or debris from the loading operations and all rinse/wash water will be directed to proper drains and the appropriate waste water treatment system.
- Each end dump trailer shall be securely covered with a tarp system in a manner to cover all gaps and to provide for a sealed trailer during removal and shipment.
- The tarped trailer and truck shall be first inspected to ensure that there are no gaps or tears and that the container is fully secured and sealed and then pressure washed with city water to remove exterior dust from the trailer, tarp and truck and all rinse/wash water will be directed to proper drains and the appropriate waste water treatment system.
- All of the above activities shall be conducted in the corridor section (with the door to the corridor closed during loading and decontamination, and will be opened only during entry and exit) inside the Total Enclosure Building which is under negative pressure and which is vented to air pollution control system which is permitted by SCAQMD and is in full operation and is equipped with HEPA filtration.
- Exide will inspect the truck and trailer for adequacy of decontamination and complete a Decon Checklist (see attached Decon checklist).

- Trucks used for off-site shipments of this material shall go through the SCAQMD permitted truck wash system before leaving the facility. The trucks with the end dump trailers shall not be stored at the facility. Exide shall maintain records of washed trucks on the Truck Wash Log/Spread Sheet and records maintained inside the Bandini Street guard station, or other appropriate location at Exide, and made available to SCAQMD staff, upon request.
- Exide shall comply with all applicable requirements of SCAQMD Rules, Regulations, Compliance Plans and Mitigation Plans, as well as all applicable rules and regulations and requirements of other agencies, such as DTSC, DOT, etc., related to removal, transport and shipment of this material.
- The transport trucks shall be dry and not dripping water from the trailer prior to leaving the plant so that there is no uncertainty regarding existence of any leaks vs. dripping of water from the truck wash system, to prevent the dripping of liquid hazardous waste during offsite transport.

Prepared date: **June 24, 2015**
Prepared by: Dan Henke 765.808.4862

SCAQMD Notification#: **Date & Time:** 6/24/2015 10:00 am

Exide Recycling Facility – Vernon, CA. **Revision:** 07/07/2015 Dan Henke
Date of submittal: June 24, 2015

Under Section 6 (Other Maintenance and Specific Mitigation Measures) subpart b. of the Mitigation plan

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Shipments of the Blast Feed Materials – Refinery Drosses and Plates shall begin on July 9, 2015 and completed by September 25, 2015. The trucks shipping rate will be approximately 6 to 12 truck loads per day Monday through Friday (typically 6:00 AM – 5:00 PM).

Removal & Shipment of Blast Furnace Feed [Ex-103] – Refinery Drosses & Plates

Description of Work:

The Blast Furnace Feed Room has material stockpiled in it that must be removed. These are Reverb Slag, Mix of Refinery Drosses & Plates, Blast Slag, Refinery Drosses, Cast Iron, Lime Rock and Coke (see table below). All these materials except for the Refinery (Tin & Antimony) Drosses are going to be loaded into lined, leak proof / end dump trailers for removal. This mitigation plan is only discussing the Refinery Drosses & Plates being loaded and shipped into lined, burrito wrapped, tarp covered, leak proof / end dump trailers.

Material	Quantity (lbs)	Classification	Waste Code	Receiving Facility	Method	Number of Trucks	Note
Dross & Plates - Blast Feed	2,520,000	RCRA Hazardous Waste	D006, D008	TBD	Recycling	60	From Refining Kettles, lead plates
Reverb Slag	1,512,000	RCRA Hazardous Waste	D006, D008	Muncie	Recycling	36	From Reverb furnace
Tin Dross (Sn)	798,000	RCRA Hazardous Waste	D008	TBD	Recycling	19	From Refining pots - to be recycled
Cast Iron	499,408	RCRA Hazardous Waste	D008	Muncie	Recycling	12	To be recycled - contaminated
Antimony Dross (Tn)	346,500	RCRA Hazardous Waste	D008	TBD	Recycling	8	From Refining pots - to be recycled
Lime Rock	70,560	RCRA Hazardous Waste	D008	US Ecology	Disposal	2	Disposal
Blast Coke (Floor)	38,448	RCRA Hazardous Waste	D008	US Ecology.	Disposal	2	Disposal
Blast Slag	1,000	Existing Profile		US Ecology.	Disposal		Goes to La Paz for disposal
						139	

This project entails loading the Refinery Drosses & Plates stored in the Blast Furnace Feed Room into lined, burrito wrapped, tarp covered, leak proof / "end dump" trailers, decontaminating the "end dump" trailers and shipping the decontaminated "end dump" trailers to an off-site processing location (just as was used for the Reverb Feed material in Mitigation Plan EX-92). The off-site facility shall be a processing site with the appropriate RCRA certification. The Refinery Drosses & Plates shall be shipped to the Exide Muncie, Indiana recycling center and Doe Run Company Boss, Missouri recycling center. See attached maps to Muncie, IN and Boss, MO. The shipment manifests shall have the requisite credentials of the receiving location. The loading and decontamination shall occur according to the DTSC approved procedures in the corridor portion of the Total Enclosure Building which is under negative pressure and is vented to SCAQMD permitted air pollution control equipment equipped with HEPA filters which is in full operation. The Blast Furnace Feed, including but not limited to the Refinery Drosses & Plates, is located in the Blast Furnace Feed Room located at the southeastern area of the Total Enclosure Building.

Characteristics, quantities and mitigation measures utilized during this work are detailed below.

Characteristics / Quantities:

Blast Feed Materials:
Refinery Drosses & Plates … RCRA Hazardous classification
Size range – ¼ inch to 18 inch, typical
Quantity – approx. 2,520,000 lbs (approx. 60 trucks)

Specific Mitigation Measures:

- Each end dump trailer shall be first inspected and examined to ensure there are no cracks or holes in the container prior to lining the containers in preparation for loading of the trailers. This inspection shall be noted on the pre-loading checklist (see attached Pre-Loading checklist).
- The end dump trailers are a leak-proof design and after inspection for cracks or holes in the container shall be lined at Exide with a single 6-mil poly propylene liner prior to loading any material to enhance the existing gasketed rear door.
- The 6-mil poly propylene liner shall be of such a dimension in length and width in order to make a "burrito" type enclosure after loading the material using industrial type duct tape. This procedure mimics that used to transport material containing asbestos.
- The rib structure on top of the end dump trailers shall be rotated out of the way prior to lining, loading and completion of the burrito wrap. The rib structure shall then be rotated back into position for clean up and securely covering the trailer with tarp material.
- The material shall be carefully loaded with front end loaders into lined leak proof / end dump trailers in a manner to prevent or minimize any fugitive dust generation during the loading operation. The use of water sprays on dusty stockpile material shall be utilized to minimize or prevent fugitive dust generation during loading. Also, water, misting sprays shall be utilized at the loading point of the end dump trailers while the material is transferred into the trailers.
- The rib structure above the end dump trailer and the top edges of the trailer shall be completely wiped clean with wet cloth after completion of loading of the material into the trailer in order to remove any dust or debris collected on the ribs structure or top edges during the loading operation.
- After cleaning of the rib structure and top edges of the trailer, the outside of the trailer will be pressure washed to remove any dust or debris from the loading operations and all rinse/wash water will be directed to proper drains and the appropriate waste water treatment system.
- Each end dump trailer shall be securely covered with a tarp system in a manner to cover all gaps and to provide for a sealed trailer during removal and shipment.
- The tarped trailer and truck shall be first inspected to ensure that there are no gaps or tears and that the container is fully secured and sealed and then pressure washed with city water to remove exterior dust from the trailer, tarp and truck and all rinse/wash water will be directed to proper drains and the appropriate waste water treatment system.
- All of the above activities shall be conducted in the corridor section (with the door to the corridor closed during loading and decontamination, and will be opened only during entry and exit) inside the Total Enclosure Building which is under negative pressure and which is vented to air pollution control system which is permitted by SCAQMD and is in full operation and is equipped with HEPA filtration.
- Exide will inspect the truck and trailer for adequacy of decontamination and complete a Decon Checklist (see attached Decon checklist).
- Trucks used for off-site shipments of this material shall go through the SCAQMD permitted truck wash system before leaving the facility. The trucks with the end dump trailers shall not be stored at the facility. Exide shall maintain records of washed trucks on the Truck Wash

Log/Spread Sheet and records maintained inside the Bandini Street guard station, or other appropriate location at Exide, and made available to SCAQMD staff, upon request.

- Exide shall comply with all applicable requirements of SCAQMD Rules, Regulations, Compliance Plans and Mitigation Plans, as well as all applicable rules and regulations and requirements of other agencies, such as DTSC, DOT, etc., related to removal, transport and shipment of this material.
- The transport trucks shall be dry and not dripping water from the trailer prior to leaving the plant so that there is no uncertainty regarding existence of any leaks vs. dripping of water from the truck wash system, to prevent the dripping of liquid hazardous waste during offsite transport.

Hazardous Materials Route Summary
Vernon,CA to Muncie,IN

Origin:	Vernon,CA
Destination:	Muncie,IN
Driving Distance:	2144.0 miles
Driving Time:	35:02
Route Type:	53 ft. MileMaker Practical Route
Locations:	Flagstaff,AZ
	Oklahoma Cy,OK

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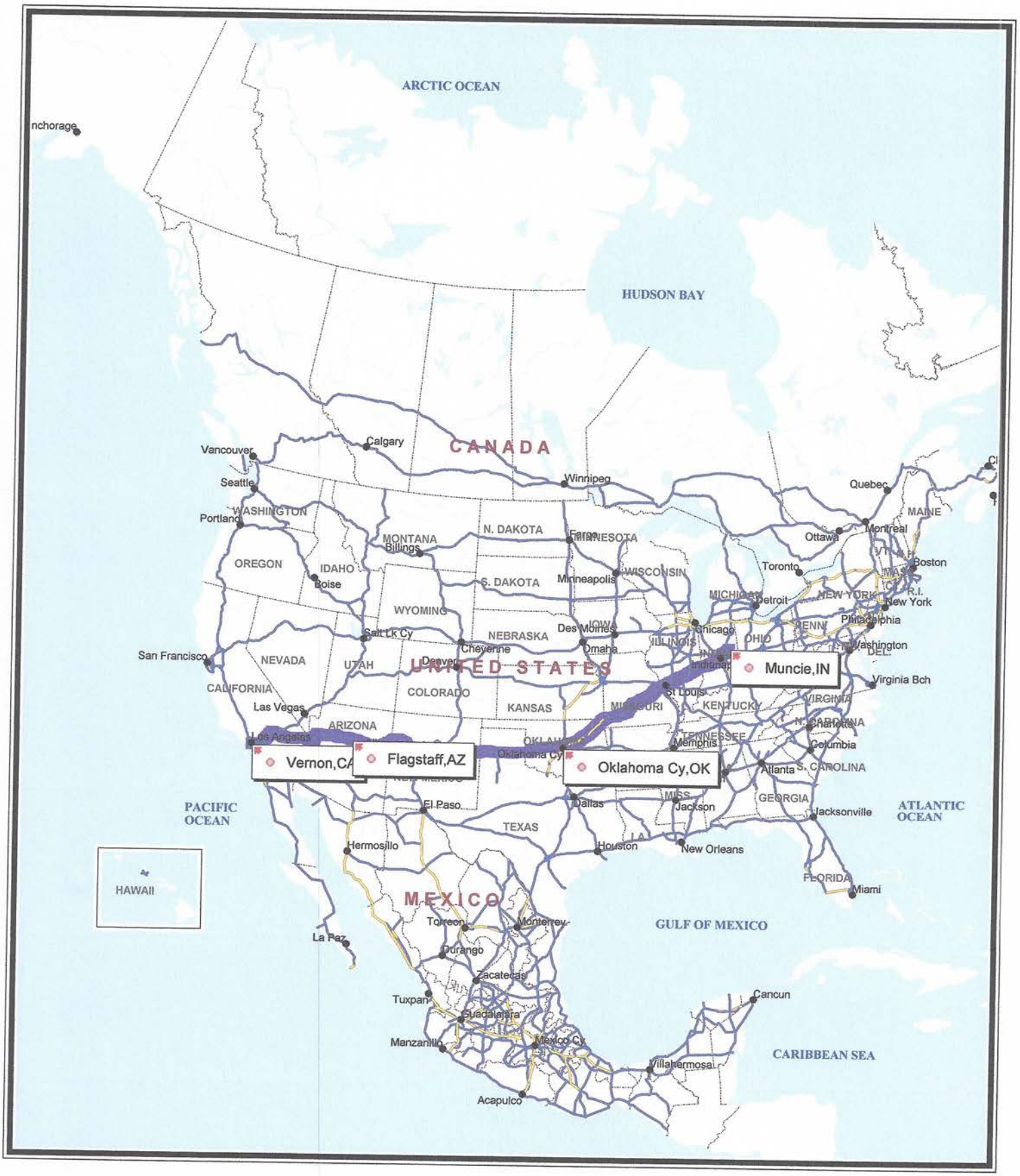
Hazardous Materials Overview Map
Vernon,CA to Muncie,IN



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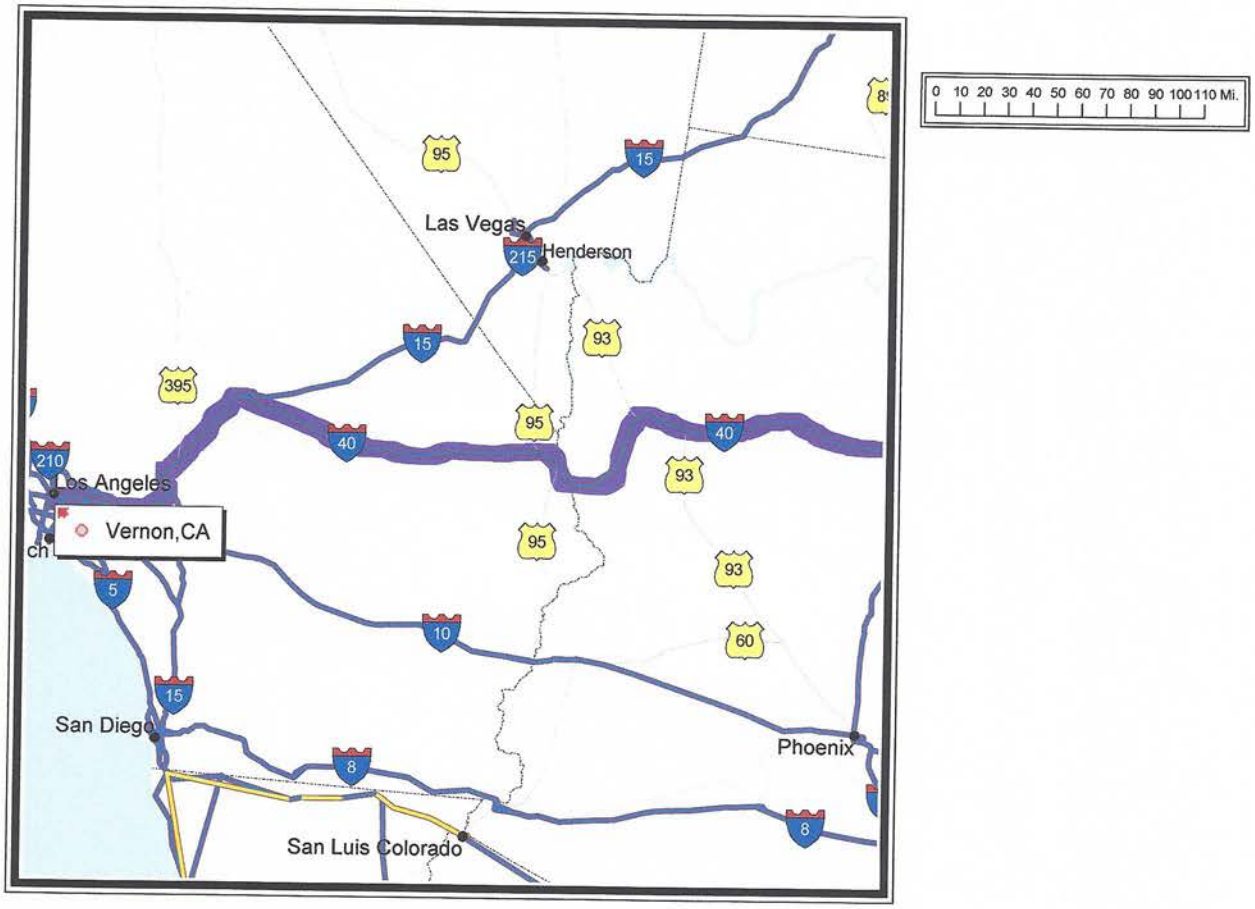
ALAMEDA ST
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
ALAMEDA ST	N	3	SE OF LOS ANGELES,CA	0:15	3		p.14-15,SJ-11
US 101	E	1	SE OF LOS ANGELES,CA	0:16	4		p.14-15,SJ-11
SN BERDINO FRWY	E	40	NW OF MIRA LOMA,CA	1:03	44		p.14-15,SJ-13
I 15	N	73	SE OF BARSTOW,CA	2:21	118		p.14-15,SH-14
I 40	E	155	CA/AZ STATE LINE	5:02	273		p.8-9,G-2
I 40	E	195	FLAGSTAFF,AZ	8:02	467	VIA	p.8-9,F-8

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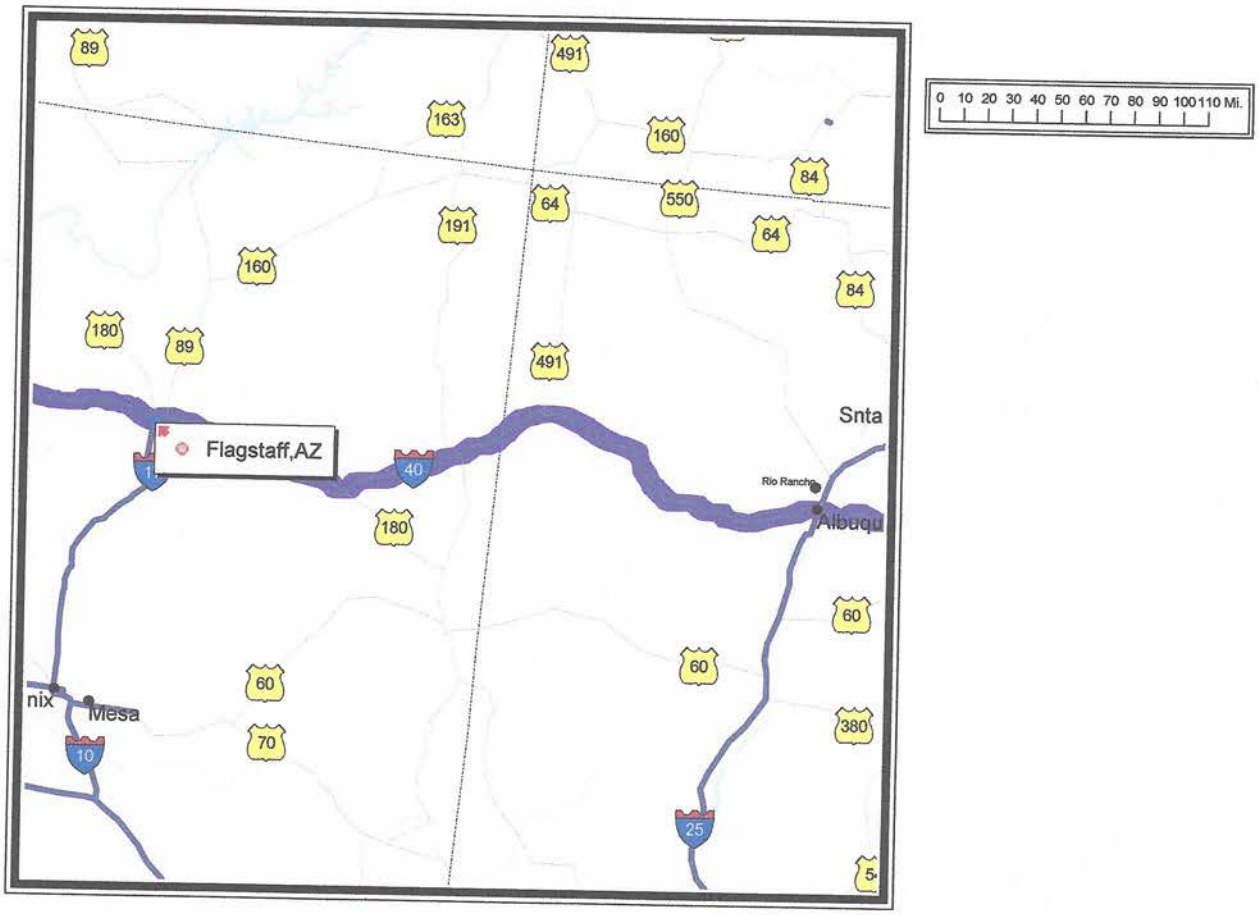
I 40
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	195	FLAGSTAFF,AZ	8:02	467	VIA	p.8-9,F-8
I 40	E	164	AZ/NM STATE LINE	10:35	632		p.8-9,E-14
I 40	E	373	NM/TX STATE LINE	16:22	1005		p.98-99,WD-8

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I 40
Vernon,CA to Muncie,IN

Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	373	NM/TX STATE LINE	16:22	1005		p.98-99,WD-8
I 40	E	177	TX/OK STATE LINE	19:14	1182		p.82-83,G-7

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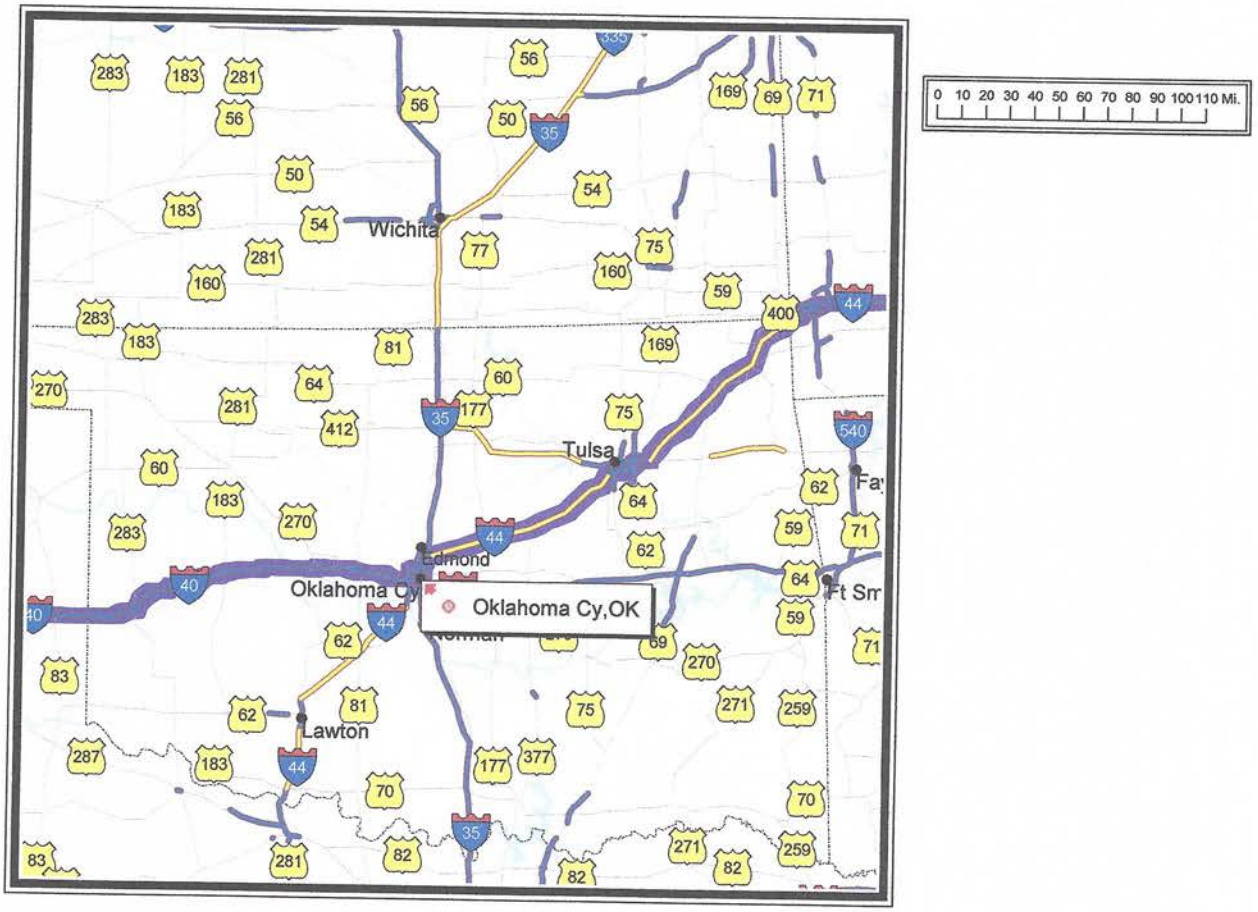
I 40
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 40	E	177	TX/OK STATE LINE	19:14	1182		p.82-83,G-7
I 40	E	147	W OF OKLAHOMA CY,OK	21:34	1329		p.82-83,F-13
I 44	E	8	N OF OKLAHOMA CY,OK	21:42	1337		p.82-83,F-13
I 235	S	5	OKLAHOMA CY,OK	21:47	1342	VIA	p.82-83,F-13
I 35	N	11	SW OF ARCADIA,OK	21:58	1353		p.82-83,F-13
I 44	E	195	OK/MO STATE LINE	25:00	1547	TL	p.40-41,J-19
I 44	E	290	ST LOUIS,MO	29:30	1838		p.58-59,G-18

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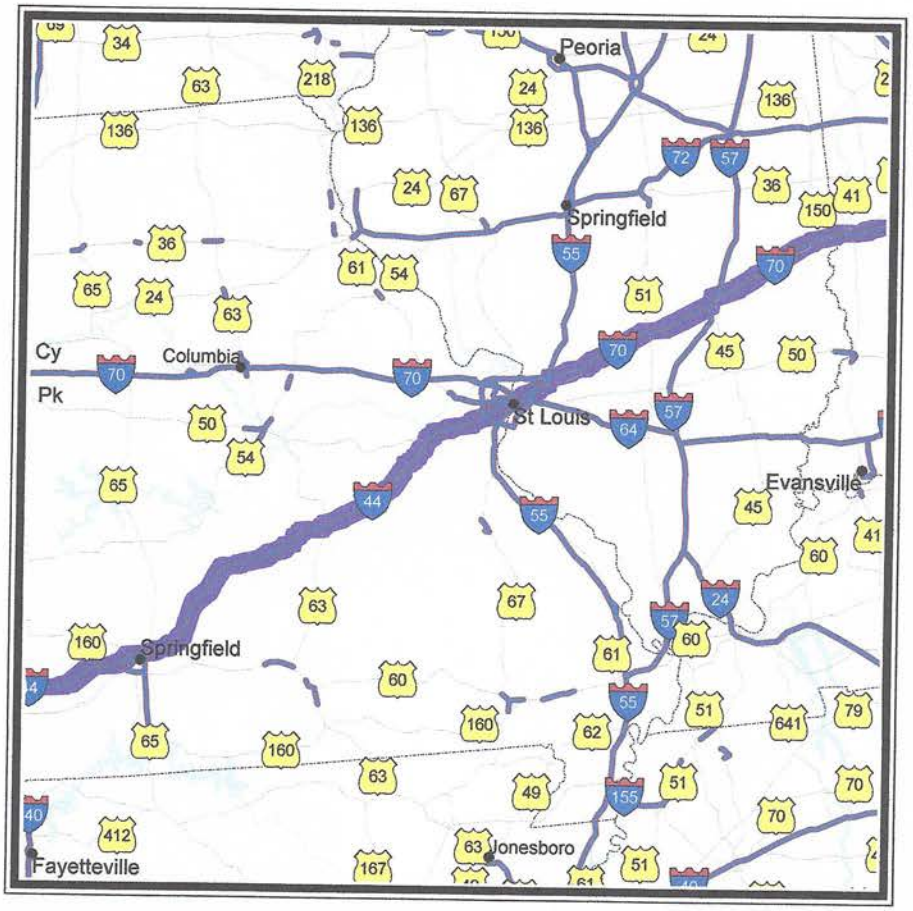
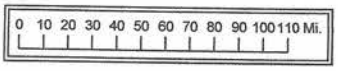
I 44
Vernon,CA to Muncie,IN





Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 44	E	290	ST LOUIS,MO	29:30	1838		p.58-59,G-18
I 55	N	2	MO/IL STATE LINE	29:32	1839	BR	p.58-59,G-18
I 55	N	19	NW OF TROY,IL	29:53	1859	BR	p.32-33,N-7
I 70	E	141	IL/IN STATE LINE	32:19	2000		p.32-33,L-13
I 70	E	73	W OF INDIANAPOLIS,IN	33:35	2073		p.36-37,K-8

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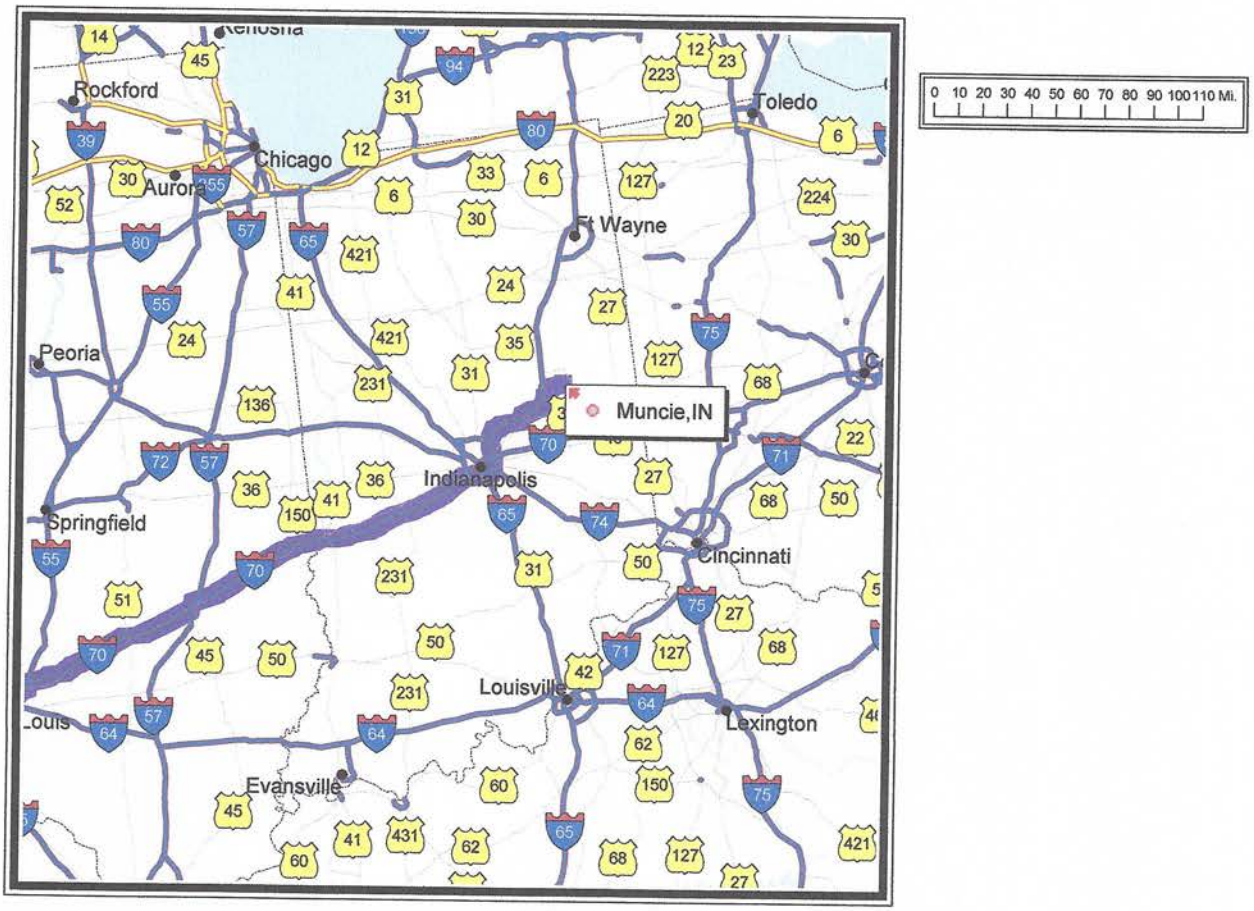
I 70
Vernon,CA to Muncie,IN



Hazardous Materials Itinerary

Road	Direction	miles	To	Time	Distance	Notes	Motor Carriers' Key
I 70	E	73	W OF INDIANAPOLIS,IN	33:35	2073		p.36-37,K-8
I 465	E	26	NE OF INDIANAPOLIS,IN	34:04	2098		p.36-37,J-9
I 69	N	34	SW OF DALEVILLE,IN	34:41	2132		p.36-37,I-11
IN 32	E	12	MUNCIE,IN	35:02	2144		p.36-37,H-12

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mapquest

Notes

Trip to:

Exide Technologies
2601 W Mt Pleasant Blvd
Muncie, IN 47302
(765) 747-9980
2129.65 miles / 32 hours 36 minutes

Exide Technologies
2700 S Indiana St, Vernon, CA 90058
(323) 262-1101

Download Free App

1. Start out going **south** on **S Indiana St** toward **Bandini Blvd.** Map	**0.05 Mi** *0.05 Mi Total*
2. Turn **left** onto **Bandini Blvd.** Map	**1.2 Mi** *1.2 Mi Total*
3. Merge onto **I-710 N / Long Beach Fwy N** via the ramp on the **left.** Map	**2.1 Mi** *3.3 Mi Total*
4. Merge onto **CA-60 E / Pomona Fwy E** via **EXIT 20A** toward **Pomona.** Map	**8.7 Mi** *11.9 Mi Total*
5. Merge onto **I-605 N / San Gabriel River Fwy N** via **EXIT 12.** Map	**8.2 Mi** *20.2 Mi Total*
6. Merge onto **I-210 E / Foothill Fwy E** via **EXIT 27A** toward **San Bernardino.** Map	**8.7 Mi** *28.9 Mi Total*
7. **I-210 E / Foothill Fwy E** becomes **CA-210 E / Foothill Fwy E.** Map	**18.1 Mi** *47.0 Mi Total*
8. Merge onto **I-15 N** via **EXIT 64A** toward **Barstow.** Map	**67.5 Mi** *114.5 Mi Total*
9. Keep **right** to take **I-40 E** via **EXIT 184A** toward **Needles** (Passing through **Arizona**, **New Mexico** and **Texas**, then crossing into **Oklahoma**). Map	**1202.6 Mi** *1317.1 Mi Total*
10. Take the **Kilpatrick Turnpike** exit, **EXIT 139.** Map	**0.8 Mi** *1317.9 Mi Total*
11. Keep **right** at the fork in the ramp. Map	**0.4 Mi** *1318.4 Mi Total*
12. Merge onto **John Kilpatrick Turnpike E** (Portions toll). Map	**25.2 Mi** *1343.6 Mi Total*
13. **John Kilpatrick Turnpike E** becomes **I-44 E** (Portions toll). Map	**87.3 Mi** *1430.9 Mi Total*

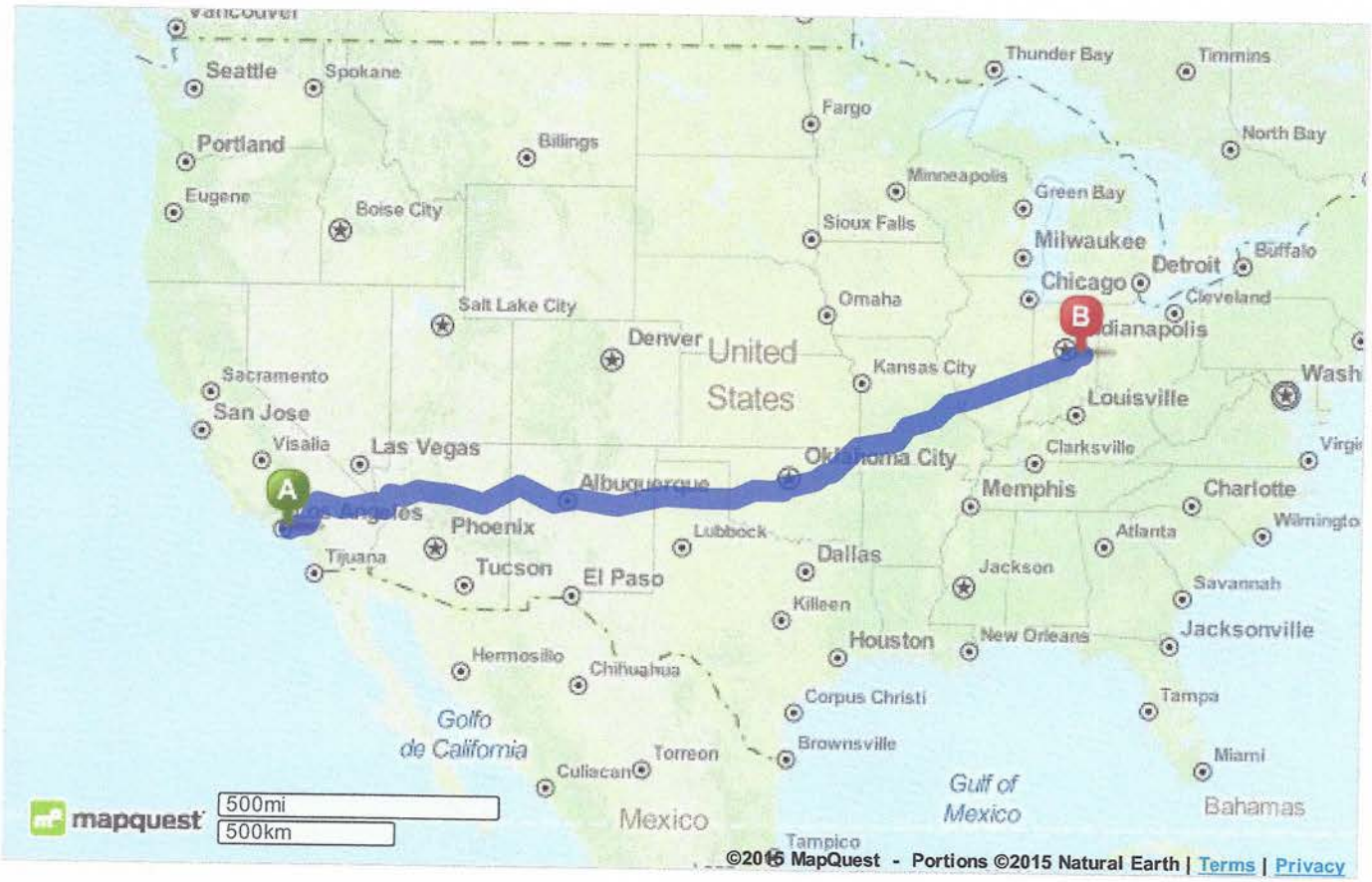
EAST 44

	14. Keep **right** to take **I-44 E** toward **Joplin** (Portions toll) (Crossing into **Missouri**). Map	**398.3 Mi** *1829.2 Mi Total*
	15. Merge onto **I-55 N / I-64 E / US-40 E** via **EXIT 291A** toward **I-70 E / Illinois** (Crossing into **Illinois**). Map	**3.1 Mi** *1832.2 Mi Total*
	16. Keep **left** to take **I-55 N** toward **Great River Road N / Chicago / Indianapolis**. Map	**16.2 Mi** *1848.4 Mi Total*
	17. Merge onto **I-70 E** via **EXIT 20A** toward **Indianapolis** (Crossing into **Indiana**). Map	**223.9 Mi** *2072.4 Mi Total*
	18. Keep **right** to take **I-70 E** via **EXIT 112A** toward **Columbus OH**. Map	**5.7 Mi** *2078.0 Mi Total*
	19. Take the **I-465 / IN-37 N / US-421 N / I-70 E / IN-37 S / US-36 / US-421 S** exit, **EXIT 89**. Map	**0.9 Mi** *2078.9 Mi Total*
	20. Merge onto **I-465 N / US-31 N / US-52 W / US-421 N / IN-37 N / USS Indianapolis Memorial Hwy N**. Map	**7.1 Mi** *2086.0 Mi Total*
	21. Merge onto **I-69 N** via **EXIT 37** toward **Ft Wayne**. Map	**33.5 Mi** *2119.5 Mi Total*
	22. Take the **IN-67 N / IN-32** exit, **EXIT 234**, toward **Anderson / Muncie**. Map	**0.4 Mi** *2119.9 Mi Total*
	23. Turn **right** onto **W Commerce Rd / IN-67 / County Hwy-550**. Continue to follow **IN-67**. Map	**7.7 Mi** *2127.6 Mi Total*
	24. Take the ramp toward **Hoyt Ave**. Map	**0.3 Mi** *2127.9 Mi Total*
	25. Merge onto **S Old State Road 67**. Map	**0.3 Mi** *2128.2 Mi Total*
	26. Stay **straight** to go onto **S Old State Highway 67**. Map	**0.05 Mi** *2128.3 Mi Total*
	27. **S Old State Highway 67** becomes **S Old State Road 67**. Map	**0.09 Mi** *2128.4 Mi Total*
	28. Turn **slight left** onto **S Hoyt Ave**. Map	**0.9 Mi** *2129.3 Mi Total*
	29. Take the 2nd **right** onto **W Mt Pleasant Blvd**. Map	**0.4 Mi** *2129.6 Mi Total*
	30. **2601 W MT PLEASANT BLVD** is on the **right**. Map	

Exide Technologies

2601 W Mt Pleasant Blvd, Muncie, IN 47302
(765) 747-9980

Total Travel Estimate: **2129.65 miles - about 32 hours 36 minutes**



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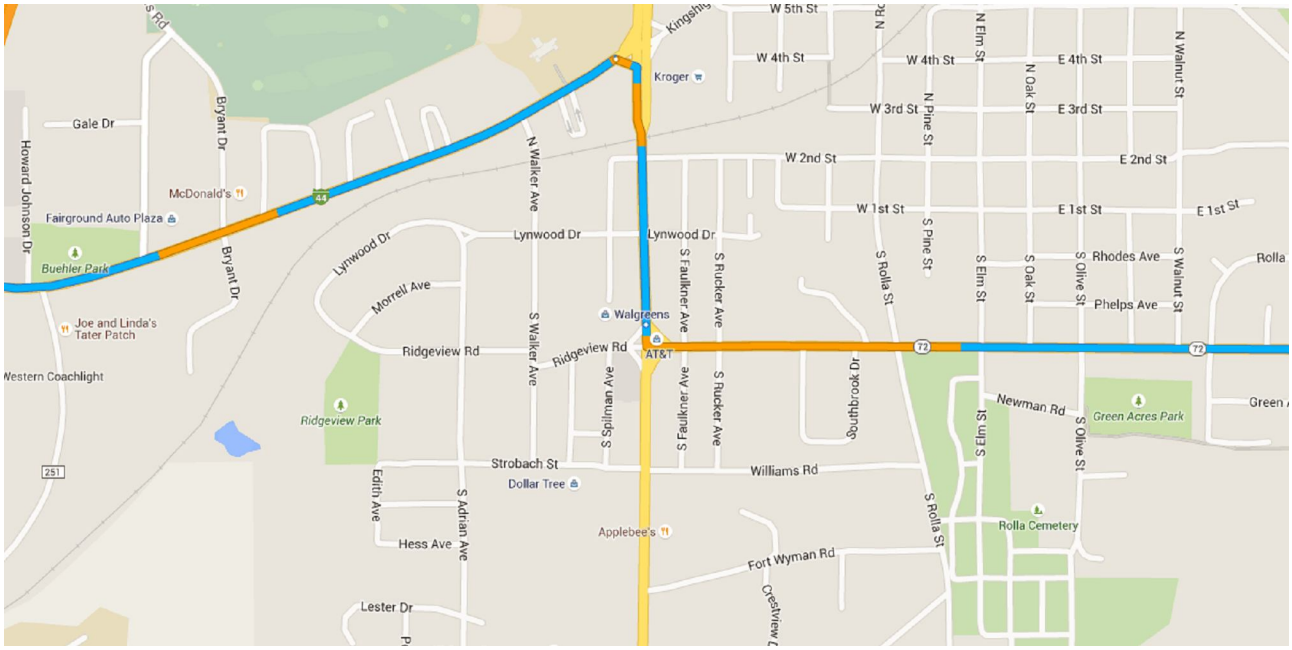
Google

Drive 1,777 miles, 26 h

Directions from 2700 S Indiana St to Doe Run Co



2700 S Indiana St

Vernon, CA 90058

Get on I-710 N/Long Beach Fwy

1.5 mi / 5 min

1. Head south on S Indiana St toward Bandini Blvd

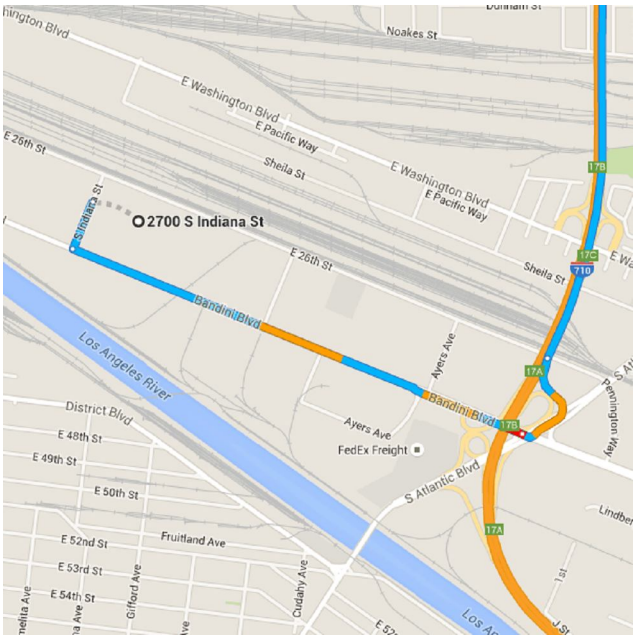
   0.1 mi

2. Turn left onto Bandini Blvd

   1.1 mi

3. Turn left to merge onto I-710 N/Long Beach Fwy

   0.3 mi



Take I-40 E and I-44 E to I-44BUS E/Kingshighway in Rolla. Take exit 184 from I-44 E

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1,722 mi / 24 h

4. Merge onto I-710 N/Long Beach Fwy
1.9 mi

5. Use the right 2 lanes to take exit 20A to merge onto CA-60 E/Pomona Fwy toward Pomona
8.6 mi

6. Keep left to continue on CA-60 E
13.6 mi

7. Keep left at the fork to stay on CA-60 E, follow signs for Pomona/Riverside
15.2 mi

8. Use the right 2 lanes to take exit 41 to merge onto I-15 N toward N Barstow
9.3 mi

9. Keep left to stay on I-15 N
67.1 mi

10. Keep right at the fork to continue on I-40 E, follow signs for Needles
Passing through Arizona
Entering New Mexico
674 mi

11. Keep left to stay on I-40 E
Passing through Texas
Entering Oklahoma
527 mi

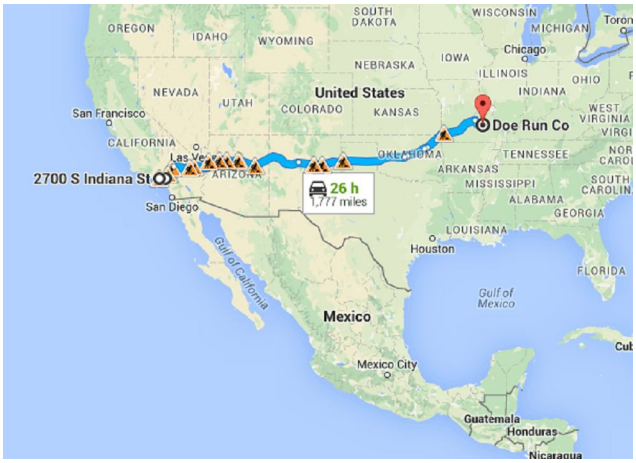
12. Take exit 139 for John Kilpatrick Turnpike
0.8 mi

13. Keep right at the fork to stay on Exit 139, follow signs for Kilpatrick Turnpike E and merge onto John Kilpatrick Turnpike
Partial toll road
25.0 mi

14. Continue onto I-44 E
Partial toll road
87.8 mi

15. Use the right 2 lanes to take the Interstate 44 E/Oklahoma 66 E exit toward Joplin
0.3 mi

16. Continue onto I-44 E
18.2 mi



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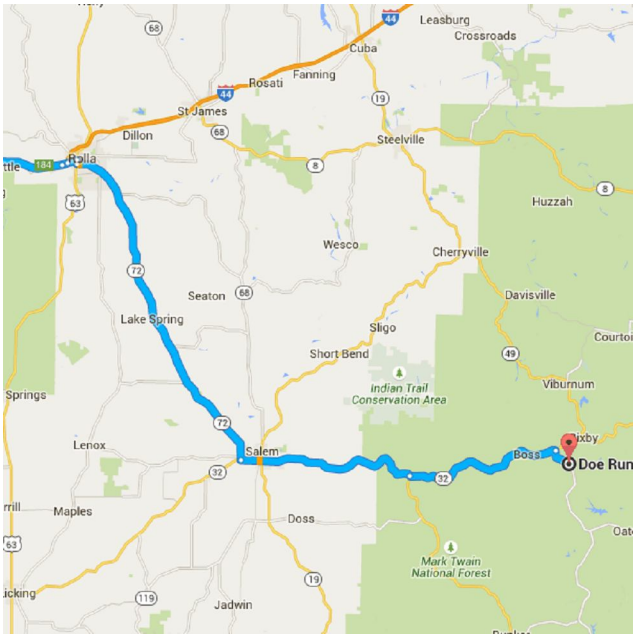
17. Use the right 2 lanes to take the I-44 E exit toward Joplin/Turnpike
    Toll road
    1.1 mi

18. Continue onto I-44 E
    Partial toll road
    Entering Missouri
    272 mi

19. Take exit 184 for I-44 BUS E toward US-63 S/Rolla
    0.4 mi

Follow MO-72 E and MO-32 E to State Hwy KK in Dent

54.2 mi / 1 h 5 min



20. Turn right onto I-44BUS E/Kingshighway
    0.7 mi

21. Turn right onto N Bishop Ave
    0.3 mi

22. Use the left 2 lanes to turn left onto MO-72 E
    25.8 mi

23. Turn left onto MO-32 E/MO-72 E
    13.7 mi

24. Slight left onto MO-32 E
    12.2 mi

25. Turn right onto State Hwy KK
    Destination will be on the left
    1.5 mi

Doe Run Co

18594 State Highway KK, Boss, MO 65440

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

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ATTACHMENT J