



**NORTH COAST RAILROAD AUTHORITY
RUSSIAN RIVER DIVISION
INSPECTION AND MAINTENANCE PLAN**

Prepared for:



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November 2009



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**INSPECTION AND MAINTENANCE PLAN
NORTH COAST RAILROAD AUTHORITY
RUSSIAN RIVER DIVISION
FREIGHT RAIL PROJECT**

Kleinfelder Project No. 78207

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1.0 INTRODUCTION

1.1 PURPOSE

The purpose of the North Coast Railroad Authority Inspection and Maintenance (I&M) Plan (Plan) is to provide an overview of the inspection and maintenance activities that are required for the safe operations of the railroad.

The I&M procedures provided in the Plan are divided into those associated with environmental regulations and those associated with the actual safe operation of the railroad per Federal Railroad Administration (FRA) and other railroad regulations.

1.2 CONTRACT OPERATOR OPERATIONS, I&M AND SAFETY PROCEDURES

NCRA requires that their contract operator at a minimum, comply with the following regulations and implement the equivalent of the following plans and procedures:

1) FRA and California Public Utilities Commission (CPUC) with special reference to:

FRA 49 Code of Federal Regulations (CFR), Parts:

- 213 Track Standards
- 214 Railroad Workplace Safety
- 215 Freight Car Safety Standards
- 217/218 Railroad Operating Rules and Practices
- 219 Random Alcohol and Drug Testing
- 220 Railroad Communications
- 221 Rear End Marking Device
- 222 Use of Horns at Public Highway- Rail Grade Crossings
- 225 Railroad Accidents and Reporting
- 228 Hours of Service
- 229 Railroad Locomotive Safety Standards



- 231 Railroad Safety Appliance Standards
- 232 Railroad Power Brakes and Drawbars
- 234 Grade Crossing Signals
- 240 Qualifications and Certification of Locomotive Engineers

CPUC General Orders:

- 26D Railroad Horizontal and Vertical Clearances
 - 72B Construction and Maintenance of Grade Crossings
 - 75D Protection of Crossings at Grade
 - 95 Overhead Electric Line Construction
 - 118 Maintenance of Walkways Adjacent to Trackage
- 2) Environmental Regulations as identified in the NCRA Environmental Compliance Program Plan (ECPP), as applicable to the rail lines operated by the operator.



2.0 ENVIRONMENTAL INSPECTION AND MAINTENANCE REQUIREMENTS

The NCRA ECPP identifies the primary environmental regulations and requirements associated with the operation and maintenance of the railroad. The majority of those regulations have inspection and maintenance requirements. The following provides a summary of those requirements.

NCRA's contract operator shall implement the requirements as identified in NCRA's plans.

2.1 HAZARDOUS MATERIALS AND HAZARDOUS WASTE

All areas and equipment associated with the management of hazardous materials and waste shall be inspected and maintained on a regular basis and in accordance with the environmental regulations identified in the NCRA ECPP. Table 2-1 provides an inspection schedule and checklist.

Table 2-1
Inspection Schedule and Checklist

Item	Required Inspections	Schedule
Hazardous Materials Storage Areas or HazMat Lockers	<ul style="list-style-type: none"> • Condition of containers/drums • Closed lids • Spills or leakage • MSDS • Expiration dates of chemicals/cleaners • Security • Emergency/spill equipment 	Weekly
Hazardous Waste Storage Area	<ul style="list-style-type: none"> • Condition of containers/drums • Closed lids • Spills or leakage • Labels • Storage/accumulation date • Aisle space • MSDS • Security • Emergency/spill equipment • Record keeping • Shipment papers 	Weekly



INSPECTION AND MAINTENANCE PLAN
2.0 ENVIRONMENTAL INSPECTION AND MAINTENANCE REQUIREMENTS

Table 2-1 (Continued)
Inspection Schedule and Checklist

Item	Required Inspections	Schedule
Hazardous Waste Satellite Accumulation Areas	<ul style="list-style-type: none"> • Condition of containers/drums • Closed lids • Spills or leakage • Labels • Storage/accumulation date • Security 	Daily at active work sites
Emergency Equipment	<ul style="list-style-type: none"> • Personal Protective Equipment 	Prior to each use and monthly
	<ul style="list-style-type: none"> • Eye wash/shower 	Monthly
	<ul style="list-style-type: none"> • Fire extinguishers 	Monthly
	<ul style="list-style-type: none"> • Absorbents/sand bags 	Monthly
	<ul style="list-style-type: none"> • Spill kits 	Monthly
	<ul style="list-style-type: none"> • Communication/alarm equipment 	Monthly
Lighting	<ul style="list-style-type: none"> • Bulbs/lamps • Storage of used bulbs/lamps 	Monthly
Security	<ul style="list-style-type: none"> • Locks/fences 	Weekly

2.2 AIR QUALITY

NCRA does not have any stationary source facilities that require air permitting; however, some of the routine maintenance and repair activities are subject to air quality regulations. The key activities that require inspection and maintenance are those activities that can generate particulate emissions (dust) or volatile emissions (gasoline, solvents, hydrocarbons). Therefore stockpiles, dirt roads and dust generating activities shall be inspected on a routine bases and daily during windy conditions to confirm that the particulate control measures are being effectively implemented. In addition, as discussed above in Section 2.1, the storage of volatile materials or waste shall be inspected to prevent releases of air emissions.

2.3 WATER QUALITY

NCRA's BMPs and SWPPPs identify procedures that NCRA shall conduct to prevent impacts to water quality. As part of these procedures, inspection and maintenance is required to monitor the condition of stockpiles, erosion control measures, and other activities that have the potential of impacting water quality.



INSPECTION AND MAINTENANCE PLAN

3.0 RAILROAD OPERATIONS INSPECTION & MAINTENANCE

3.0 RAILROAD OPERATIONS INSPECTION & MAINTENANCE

The inspection, maintenance and repair of the track in Russian River Division (RRD) that is being operated are regulated by the FRA (49 CFR Parts 213, 214, 234, 236 and FRA's Emergency Order No. 21) and CPUC General Orders.

NCRA's contract operator will typically conduct the routine track inspections themselves; however, the contract operator intends to use qualified railroad contractors to conduct significant maintenance and repairs activities such as replacing ties, ballast and rail as needed.

In accordance with FRA regulations, NCRA's contract operator will train and certify its employees to conduct track inspections as provided in the operator's Track Safety Standards Program (49 CFR Part 213) and the Roadway Worker Safety Program (49 CFR Part 214). Records of the training and certification will be maintained at NCRA and/or their operator's office.

The main track shall be inspected as required by FRA regulations and in accordance with the contract operator's judgment. The track inspector shall pay particular attention to the geometry of the track including the crosslevel and alignment, superelevation in curves, spirals, and the condition of ties, rails, anchors, spikes, joint bars and the nuts/washers/bolts securing them. The track inspector shall also observe the condition of bridges, culverts, grade crossings, vegetation and the roadway including the embankments (cuts and fills). The track inspector shall make a record of the findings on each inspection giving the details and location of any deficiencies observed, and the corrective or follow-up actions taken. The track inspection records will be maintained at NCRA's operator's office.

The following provides a summary of the primary inspection and maintenance activities that are required by FRA and CPUC to maintain a railroad for safe operations.



3.1 GENERAL TYPES AND FREQUENCY OF INSPECTIONS

- **Cursory Inspections:** A cursory inspection is a walk through inspection of short duration. It is primarily performed to detect any major defects that are visibly detectable without employing tactile methods.
- **Periodic Maintenance Inspections:** A periodic maintenance inspection is a regular comprehensive inspection meeting regulatory requirements. It is typically conducted using visual, tactile and auditory skills with sufficient intensity or attention to detail to detect cracks, damage or broken components, signs of wear and tear or other signs of distress.
- **Interim Inspections:** Interim inspections are conducted when periodic inspections identify a substandard condition.
- **Emergency Inspections:** Emergency inspections are conducted after emergency incidents such as derailment, fire, flood, earthquake, or collision impact. Resumption of rail operations cannot occur until the inspection is complete, it has been determined to be safe and authorization has been given.

3.2 PRE-START UP JOINT INSPECTION OF FACILITIES

NCRA and its contract operator shall make joint inspections of the infrastructure of any portion of the RDD rail line prior to startup of freight operations. Freight operations will be initiated in a phased approach; therefore, the southern sections of the line will be inspected prior to the northern sections.

The purposes of the inspections are to determine that:

- The requirements of the Consent Decrees and FRA Emergency Order No. 21 have been met prior to operation on any segment of the track; and
- Matters under the jurisdiction of the FRA and the CPUC are in compliance prior to startup.



Items of special focus during the joint inspection will include:

- Specific actions required by the Consent Decrees;
- Track;
- Signals;
- Rail highway grade crossings;
- Embankments;
- Bridges and drainage structures;
- Right-of-way cleanup;
- Brush and vegetation removal;
- Clearances and signs for restricted clearances, including at active industries;
- Walkways and railings; and
- Signs.

3.3 TRACK

The FRA's track safety standards generally focus on the following four main areas:

- Track Structure: Rails, crossties, track switches, tie plates and rail fastening systems.
- Track Geometry: Track gage, alignment, elevation, curvature and track surface.
- Road Bed: Drainage and vegetation.
- Track Inspections: Frequency and quality of inspections, special instructions and recordkeeping.

Under FRA regulations, each railroad has the primary responsibility to ensure its own track meets or exceeds the federal safety standards. This includes railroad inspectors performing track inspections at specified minimum frequencies based on the class of track, type of track, annual gross tonnage operated over the track and whether it carries passenger trains.



INSPECTION AND MAINTENANCE PLAN

3.0 RAILROAD OPERATIONS INSPECTION & MAINTENANCE

3.3.1 Weekly Track Inspections

Since the NCRA track is a Class 2 or Class 3 track, a minimum of weekly inspections are required by FRA. NCRA's operator will inspect the track by either walking or by riding over the track in a vehicle at such speed that the condition of the track structure can be accurately observed. Inspections shall include, but not be limited to, observations of road bed, drainage, track alignment, gauge, ties, rail joints, rail surface, elevations, rail anchorage and switches.

3.3.2 Track Grade, Embankments, Erosion Control

The general condition of the track grade, including embankments, and cuts/fills, is included in the weekly track inspection.

Railroad embankment maintenance is anticipated to be minimal over most of the RRD line. However, there are locations in the RRD that are susceptible to flooding, washouts and/or embankment problems.

These areas are subject to flooding and damage especially during winter storms when high winds and rain, wave action and high water from runoff can all occur at the same time.

During storms and when the potential for damage exists, NCRA's operator will conduct additional track inspections as necessary to be certain that the railroad is safe for movement.

Proper drainage and erosion control are essential to maintaining the safety and stability of the track. If erosion is observed, NCRA or its operator will take the actions necessary to control the erosion to the extent possible. Qualified railroad and/or marine contractors will be utilized to perform these repairs, except where NCRA or their contract operator is able to place rip-rap or make repairs using railroad equipment. Some circumstances may require that permits be obtained in accordance with applicable regulations.



3.3.3 Ballast Replacement

Prior to the startup of freight operations on any section of the RRD line, the track will be restored to not less than FRA Class 2 or Class 3 track standards. NCRA does not anticipate the need to replace large quantities of ballast in the first five years after startup. NCRA also anticipates that SMART will add more track ballast and conduct extensive track surfacing as a part of its program to initiate passenger service on their portion of the line.

Should NCRA need to replace ballast, such as at a washout location, it intends to use qualified railroad track contractors to perform the work. It is probable that work trains would also be used to replace the ballast, or the ballast could be brought in by rail mounted trucks. New ballast, as needed, will be added to stabilize track conditions. NCRA's contractors will follow NCRA's BMPs and take the actions necessary to reduce dust. Normally, applying a small amount of water to the top of the loaded ballast car will provide adequate dust control.

Ballast is typically stored in one of three following ways:

- Contract with a quarry to stockpile ballast on quarry property until needed;
- Contract with a quarry to pre-load several cars of ballast and then position the cars on auxiliary tracks along the railroad for emergency use; and/or
- Stockpile the ballast on the ground at appropriate locations and in accordance with NCRA's BMPs.

3.3.4 Railroad Ties and Rail

The rehabilitation of the RRD track included the replacement of a substantial number of wooden railroad ties. Therefore, NCRA does not expect the need for significant tie replacement in the first five years of operations, with the possible exception of repairing a segment of damaged track after an incident. In addition, when SMART reconstructs the railroad to its standards for passenger service, SMART will invest in new ties and new rail to bring the track up to its standards for higher speed passenger train operations. Under this scenario, it is even less likely that NCRA or its operator will have to replace many railroad ties in the SMART territory.



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3.0 RAILROAD OPERATIONS INSPECTION & MAINTENANCE

When railroad ties are replaced, they will be replaced either by NCRA's operator by a qualified railroad track contractor. NCRA, its operator, and contractors shall manage new and used ties in accordance with NCRA's BMPs.

3.3.5 Vegetation Control

NCRA or its contract operator will apply herbicide annually in accordance with the NCRA Vegetation Management Plan and NCRA's BMPs. In accordance with 49 CFR Part 213.37, brush and trees will be trimmed, cut or removed as necessary either by qualified railroad contractors or by NCRA's operator. Brush and herbicide control is required:

- For the safety of employees and the public;
- To maintain visibility requirements for signs, signals and rail highway grade crossings;
- To maintain statutory clearances;
- To maintain proper drainage of bridges, track and the right-of-way.
- To maintain clear walkways for train crews; and
- So that vegetation will not interfere with employees performing normal trackside duties.

NCRA requires that contractors have the necessary training for identifying and working around overhead wires, including energized wires, in accordance with applicable regulations.

Records of vegetation control activities will be maintained at NCRA's and/or its contract operator's office.

3.3.6 Culvert Maintenance

NCRA and/or its contract operator will perform cursory and periodic culvert inspection, cleaning and maintenance, normally in advance of the winter months, to ensure that the drainage systems are working properly and are unobstructed.



INSPECTION AND MAINTENANCE PLAN

3.0 RAILROAD OPERATIONS INSPECTION & MAINTENANCE

Typically larger culverts (span or diameter greater than or equal to 24 inches) are inspected every two years. Inspections of individual pipes with a diameter of less than 24 inches are conducted when manifestations of problems are observed during cursory inspections such as ponding, loss of ballast or embankment concerns.

Culvert maintenance and repairs will be conducted in accordance with NCRA's BMPs and if necessary, appropriate permits and/or approvals will be obtained.

3.3.7 Flange Oilers

NCRA is required by the terms of the Environmental Consent Decree to have management procedures for the inspection and maintenance of the flange oilers along the track. NCRA has BMPs which address the management of flange oilers.

Where NCRA's operator believes that flange lubrication is necessary to reduce the curve wear on rails, to reduce noise and/or to reduce the risk of a wheel-climb derailment, NCRA's operator will install modern, controlled-flow rail lubricators that use a biodegradable lubricant instead of a petroleum-based lubricant.

3.4 SIGNALS

Two types of signal systems are currently in place on NCRA's RDD:

- Interlocking signals protecting the railroad's three movable span bridges; and
- Grade crossing warning systems at public crossings at grade.

NCRA's operator will utilize one or more qualified railroad signal contractors to inspect and maintain these grade crossing warning signal systems on that portion of the RRD that is operating, in accordance with 49 CFR Parts 233 and 234, and in accordance with the railroad's signal standards and instructions. The signal maintainers will be properly trained and will be provided with adequate test equipment. NCRA's operator requires that the signal maintenance contractor certify the qualifications of each signal maintainer who will perform work on the RDD track.

Reports of signal inspections and records of maintenance will be maintained as required at NCRA and/or their operator's office.



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3.0 RAILROAD OPERATIONS INSPECTION & MAINTENANCE

In addition to the required monthly inspection and tests, an important part of signal maintenance is the preparation and maintenance of circuit drawings for each installation. These drawings must be kept at each highway-rail grade crossing warning system location (normally in the signal house near the crossing) in accordance with 49 CFR Part 234.201. Each new signal installation will be equipped with proper signal circuit drawings. NCRA requires that its signal maintenance contractors, as a part of their maintenance obligation, properly maintain these circuit drawings. Where required, should plans be damaged by weather or use, the contractor will be required to provide replacement drawings.

Lead acid batteries, used in standby power systems for grade crossing warning signal systems, will be periodically replaced by the railroad signal maintenance contractors. These batteries will be disposed of in accordance with NCRA's BMPs and Hazardous Materials and Hazardous Waste Management Plan.

3.5 BRIDGES

NCRA and/or its operator will use qualified railroad bridge and/or marine contractors to inspect and perform structural work on its bridges. NCRA's and/or its contract operator's track inspectors will perform cursory inspections of the RDD bridges. They will also inspect the bridge approaches for settling, erosion or other conditions that may affect the safety of the bridge, especially when storms or heavy water flows occur. Inspection and maintenance records will be maintained at NCRA's and/or its operator's office.

FRA Regulations for Bridge Worker Safety are contained in 49 CFR Part 214 and constitute safety BMPs for employees working on bridges.

The frequency of bridge inspections is dependent on the bridge type and traffic characteristics but typically is as follows:

- Undergrade Bridges: Annually with no more than 15 months between inspections. Overhead bridges maintained by an agency of competent jurisdiction such as Caltrans shall undergo a cursory inspection by NCRA and/or its operator, every two years to ascertain any conditions presenting a hazard to rail operations or employees.



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- Timber Bridges and Timber Components: Annually with no more than 15 months between inspections. Interim and/or cursory inspections may be required based on site conditions, operating speeds, loads, and traffic volume.
- Open Deck Bridges: Annually with no more than 15 months between inspections. Interim and/or cursory inspections may be required based on site conditions, operating speeds, loads, and traffic volume.
- Movable Bridges: Annually with no more than 15 months between inspections. The specialized electrical and mechanical equipment unique to a movable bridge may warrant more frequent inspections based on opening cycles, traffic volume and specific site conditions. FRA regulations (49 CFR 213.235) require that a movable bridge lift rail assemblies or other transition devices be inspected on foot at least monthly. In accordance with 49 CFR 236.387, the movable bridge locking devices shall be tested at least once a year.
- Bridges in Water: All bridges in water, if water depth and foundation type warrant, shall have scour and underwater inspections of the piers and foundation on a 5 to 10 year frequency. More frequent inspections shall be conducted if flood event or flow conditions create scour hazards or concerns.

3.6 TUNNELS

All tunnels will be inspected annually with no more than 15 months between inspections. Tunnels in areas subject to freezing or heavy seasonal rainfall will be scheduled to be inspected as soon as possible after the cessation of these conditions in order to detect deterioration caused by these climatic conditions.

3.7 LOCOMOTIVES AND ROLLING STOCK

3.7.1 Locomotives

NCRA nor their operator plan to construct, acquire or operate any facilities for major repairs of locomotives.



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3.0 RAILROAD OPERATIONS INSPECTION & MAINTENANCE

NCRA's operator will contract with a qualified locomotive maintenance contractor to perform light maintenance and repairs at the designated maintenance locations on the RRD, on those line segments that it is operating.

To provide the required inspection, heavy maintenance and repair of its locomotives, for both dependable performance and regulatory compliance, NCRA's operator will contract with one of its connecting railroads to meet these requirements. When due for inspection and maintenance, the locomotive will be moved to the contractor railroad's maintenance facility. In the event that a major locomotive failure occurs on the RRD, the operator will return the locomotive to the contractor railroad's maintenance facility for repairs.

Locomotive Daily Inspections

FRA (49 CFR Part 229.21) requires that each locomotive in use shall be inspected each calendar day. A written report of the inspection shall be made and must contain certain required information. If a non-complying defect is disclosed by the inspection, it must be recorded and repaired before the locomotive is used. Where repairs are made, a notation must be made on the report showing the nature of the repairs that have been made. The report must be filed and must be retained for at least 92 days at the office of NCRA's operator or at the terminal at which the locomotive is cared for. A record must be maintained on each locomotive showing the place, date and time of the previous inspection.

At least one crew member in the train crew will be qualified to perform the locomotive daily inspection. No tools or parts are required to perform the locomotive daily inspection. The inspection may be performed at any location and does not require that the locomotive be in a maintenance area for the inspection to be properly performed. The employee performing the inspection does not need to go under the locomotive to perform any part of the daily inspection. No hazardous waste is generated by the daily inspection.



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3.0 RAILROAD OPERATIONS INSPECTION & MAINTENANCE

Locomotive Periodic Inspection and Maintenance

FRA (in 49 CFR Part 229.23) requires that each locomotive in service be inspected periodically to determine if the locomotive is in compliance with the requirements of the regulation. The inspection interval must not exceed 92 days. Each locomotive normally receives four 92-day inspections each year. The results of the locomotive inspection must be recorded on a form prescribed by FRA, signed by the person performing the inspection and certified by that person's supervisor that the work was done. The periodic inspection must be displayed under a transparent cover in the cab of the locomotive. An additional record must be maintained at the railroad's mechanical officer's headquarters location.

The periodic (92-day) inspection will be performed at a contractor railroad's maintenance facility that is equipped with the facilities and equipment required to make the required tests. These mandated inspections are more thorough than the daily inspection and require some disassembly and servicing of the locomotive's components. These inspections also require work under the locomotive where an inspection and servicing pit is used to gain access to the underneath areas of the locomotive. During these inspections, maintenance schedules also require the replacement of oil filters and other tasks that involve fluids.

FRA also requires that each locomotive in service receive an annual test (368-day inspection) and a biennial test (736-day inspection).

For each of the periodic inspections (92-day, 368-day and 736-day), detailed inspection records must be made, signed, certified and kept on file as prescribed by the FRA regulations. Each regulation includes specific items that must be inspected, tested, cleaned and/or repaired.

Periodic inspections will be contracted out with one of the connecting railroads to perform this work at that railroad's facility.

NCRA will require that any leaks or spills of used oil, waste oil, waste fuels and/or product onto the ground must be stopped immediately and the leakage collected and



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contained for later disposal at an authorized location. Notification of releases must be made to the proper authorities as required.

Locomotive Heavy Repairs and Maintenance

For the heavy repairs that may be required to the locomotives from time to time, NCRA's operator will contract with one of its connecting railroads to perform the work.

Locomotive Fueling Facilities

Due to the frequency of train operations, and locomotive fuel consumption estimates, locomotive fueling for the local freight trains is expected to be necessary only two to three times per month.

NCRA's operator does not intend to construct or use a fixed locomotive fueling facility. Instead, routine fueling of the locomotives will occur from tank trucks at the designated maintenance areas on the RRD. If non-routine or emergency fueling is required when the locomotive is on the RDD, NCRA has BMPs that shall be implemented to protect against potential, spills or releases to the environment.

3.7.2 Freight Cars

For those rail cars that are in regular interchange service with other railroads and travel the rail network, maintenance will be performed at either railroad or car owner repair facilities. If minor emergency repairs are required for a car on the RDD line, NCRA's operator will contract with a railroad or railroad car maintenance and repair contractor to make those on-site repairs necessary to return the car to its owner or to a designated maintenance facility. The maintenance or repair contract shall implement NCRA's BMPs.

For those cars that are owned or leased by NCRA's operator, the operator will contract with a connecting rail carrier or an AAR-qualified contract rail maintenance facility to perform the periodic FRA-mandated air brake maintenance and testing and any other work that may be necessary.



3.7.3 Interchange Inspections

Unless otherwise provided, when a railroad accepts a locomotive or car in interchange from a connecting railroad, it is responsible for the mechanical condition of that piece of equipment.

The rules for the interchange of rail cars are published in the *Office Manual of the AAR Interchange Rules* and the *Field Manual of Interchange Rules for Railroad Cars* both of which are published by the Association of American Railroads (AAR).

The rules for interchange of intermodal equipment are governed by the *AAR Intermodal Interchange Rules Including Billing and Repair Procedures*, effective January 1, 2007.

The interchange inspection can be performed by train crew personnel or by a railroad's mechanical department personnel. When locomotives or cars are interchanged to NCRA's operator's trains by connecting carriers, the NCRA's operator's train crew will perform an interchange inspection at the point where the equipment is received in interchange. The crew will perform this inspection while they are making the required air brake test. If one or more locomotives or cars are found to be defective, NCRA's operator will reject the equipment at the point of interchange, set the vehicle out of the train, notify the delivering carrier of the defect and return it to the delivering carrier who is responsible to repair the defective condition.

NCRA's operator will be properly trained on the performance of an interchange inspection in accordance with the AAR Interchange Rules and the AAR Intermodal Interchange Rules.

3.8 EMERGENCY INSPECTIONS

Special emergency inspections may be necessary if derailments, fires, floods, earthquakes, or other events may affect the stability of the track, signals, bridges, or tunnels.

Procedures to be used and the intensity of the emergency inspection will be determined in direct relation to the severity of the incident. NCRA's operator will follow the



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American Short Line and Regional Railroad Association (ASLRRA) recommended responses to each of the various emergency conditions.

After an earthquake has been reported, NCRA's operator will call one of the following experts to determine the epicenter and magnitude of the earthquake:

- University of California, Berkeley: (510) 642-2160 – Public Information; or (510) 642-3977 – Lab
- National Earthquake Information Center, Denver (303) 273-8500
- Office of Emergency Services, Sacramento (916) 262-1620 or (800) 852-7950

Upon determination of the epicenter and magnitude of the earthquake, train operation will be governed by the Response Levels contained in the ASLRRA program.