Director General's Environmental Assessment Requirements

Section 115Y of the *Environmental Planning and Assessment Act 1979*

Application Number	SSI- 5023
Infrastructure Project	**Liverpool Ranges Duplication Project –** the duplication of 13 kilometres of rail track across the Liverpool Ranges. Key components of the proposal comprise: • 13km of new track duplicating the existing Main North Line, five staged loops and four turnouts in permanent and temporary locations, • signalling infrastructure; and • ancillary infrastructure and access tracks.
Location	Land generally located along the existing Main North Line between the towns of Willow Tree and Murrurundi.
Proponent	Australian Rail Track Corporation
Date of Issue	17 January 2012
• General Requirements	The Environmental Impact Statement (EIS) must be prepared in accordance with and meet the minimum requirements of Part 3 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation) and include the following: 1. the information required under clause 6 of Schedule 2 of the Regulation; and 2. the content listed in clause 7 of Schedule 2 of the Regulation, including but not limited to: • a summary of the environmental impact statement; • a statement of the objectives of the project, including a description of the strategic need, justification, objectives of the relevant strategic planning and transport policies, including *NSW 2021*; • a description of the project's relationship and/or interaction with the proposed upgrades along the Main North Line; • an analysis of feasible alternatives to the carrying out of the project and project justification, including: ➢ an analysis of alternatives/ options considered, having regard to the project objectives (including an assessment of the environmental costs and benefits of the project relative to alternatives and the consequences of not carrying out the project), and the provision of a clear discussion of the route development and selection process, the suitability of the chosen alignment and whether or not the project is in the public interest, and ➢ justification for the preferred project taking into consideration the objects of the *Environmental Planning and Assessment Act 1979*; • an analysis of the project, including an assessment, with a particular focus on the requirements of the listed key issues, in accordance with clause 7(1)(d) of Schedule 2 of the Regulation (where relevant), including an identification of how relevant planning, land use and development matters (including relevant strategic and statutory matters) have been considered in the impact assessment (direct, indirect and cumulative impacts) and/or in developing management/ mitigation measures; and • detail how the principles of ecologically sustainable development will be incorporated in the design, construction and ongoing operation

	phases of the project. The EIS must address the following specific matters: • operational characteristics, including predicted rail corridor capacity, rail traffic frequency and interactions with and opportunities for increased general freight and passenger trains; • construction facilities and resources, including construction compounds, lay-down areas, spoil/fill quantities, stockpiling/ management areas and haul roads, and water use; and • project staging and timing including cumulative impacts of indicative construction stages (if proposed).
Key issues	The EIS must address the following specific matters: **Noise and Vibration** – including but not limited to: • noise and vibration from activities and sources on and off site (including to adjacent settlements), and the nature, sensitivity and impact to potentially affected receivers and structures; • the impact from the project and project stages in isolation and in a cumulative context taking into consideration proposed increased train movements across the Hunter Valley rail corridor; and • taking into account the *Interim Construction Noise Guideline* (DECC, 2009), *Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects* (DECCW, 2007), and *Assessing Vibration: a Technical Guideline* (DEC, 2006). **Ecology** – including but not limited to: • biodiversity values, and terrestrial and aquatic flora, fauna and habitat (including rare, threatened and endangered species, populations and ecological communities) and consideration of local, regional, state and corridor impacts (including consideration of the *Hunter-Central Rivers Catchment Action Plan* and the *Namoi Catchment Action Plan);* • flora and fauna surveys including targeted surveys of potentially occurring threatened species; • vegetation clearing (and resultant foraging, roosting, habitat loss, fragmentation, connectivity and edge effects) and operational impacts (such as increase in rail movements); • offsets for ecological impacts and native vegetation clearance consistent with the "improve and maintain" principle; and • taking into account the *Draft Guidelines for Threatened Species Assessment* (DEC and DPI, 2005), *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities* (DEC, 2004) and *Principles for the Use of Biodiversity Offsets in NSW* (DECCW, 2008). **Aboriginal Heritage** – including but not limited to: • impacts to Aboriginal heritage, including heritage with cultural and archaeological significance; • demonstrate effective consultation with Aboriginal communities in determining and assessing impacts and developing and selecting options and mitigation measures; • demonstration that an appropriate archaeological assessment methodology, including research design (where relevant) has been undertaken including results; • be undertaken by a suitably qualified heritage consultant; and • taking into account the *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC, 2005).

	Historic Heritage – including but not limited to: • impacts to items, archaeology and areas of state and local heritage significance within or adjacent to the corridor or affected by construction and operation activities, including impacts of increased operational train movements on the State listed Ardglen Tunnel; • be undertaken by a suitably heritage consultant(s); • demonstration that an appropriate archaeological methodology, including research design (where relevant) has been undertaken, including results; • an analysis of the potential impacts to the values, settings and integrity of the items and archaeology, including statements of heritage impacts and significance assessments; and • taking into account NSW Heritage Guidelines, including the *NSW Heritage Manual* (NSW Heritage Office, 1996); and *Assessing Heritage Significance Guidelines* (NSW Heritage Office, 2001). **Soils and Land Contamination** – including but not limited to: • land contamination and identification of the need for remediation of contaminated land, having regard to the ecological and human health risks posed by the contamination in the context of past, existing and future land uses, and the presentation of a Remedial Action Plan in accordance with relevant OEH (EPA) guidelines, if required; • geological and soil characteristics (physical and chemical) that may impact on land stability and geological integrity; • assessment of potential impact on acid sulfate soils, taking into account the *Acid Sulfate Soils Manual* (Stone et al 1998) and the *Acid Sulfate Soils Labatory Methods Guidelines* (Ahern et al 2004); • quantification of bulk earthworks and spoil balance and disposal of excess spoil; and • a strategy for managing earthworks with a particular focus on those works that have the greatest potential to disturb soils that are contaminated, have a high erosion and run off hazard. **Hydrology** – including but not limited to: • effects of floods on the project (including access and drainage augmentation); and project effects on flood characteristics (including on surrounding land, infrastructure, housing and businesses for a range of flood events up to and including the PMF), and taking into account potential for flood characteristic changes resulting from climate change; • surface water and stormwater management, including consideration of water quality (sedimentation); hydrological regimes, watercourses (including ephemeral), riparian and receiving areas; • assessment of local, regional and cumulative impacts of catchment changes and surface water balance; • consideration of impacts to Chilcotts Creek and Pages River including potential interference with fish passage during construction or operation; • groundwater hydrology, groundwater dependent ecosystems, and groundwater users and licences (as applicable); and • taking into account the *Managing Urban Stormwater: Soils and Construction* (Landcom) guidelines. **Access and Infrastructure** - including but not limited to: • construction traffic impacts, including: spoil haulage; estimated light and heavy vehicular traffic generation and distribution for each stage of construction; identification of relevant vehicular traffic routes and intersections for access to / from the sites for each stage of construction; road network changes and potential disruption to the local and regional road network; • demonstrate how construction will be undertaken without impacting on the operation of train services and the integrity of the rail corridor and

	stations; • interactions with the broader transport network, including passenger rail services and the road network, including on road infrastructure and consideration of pedestrian, cyclist and public transport facilities; • address the long term impacts of the proposal on rail stations (including non- operational) within the vicinity of the project area, the operation of train services and the integrity of the rail corridor; • access to the site and associated property severance and access restrictions; and • interactions with existing and proposed utility infrastructure, including the Queensland to Hunter Gas Pipeline. **Air Quality-** including but limited to: • an air quality assessment, including consideration of cumulative impacts associated with the existing emission sources as well as any currently approved developments linked to the receiving environment; • a Scope 1 greenhouse gas assessment (as defined by the Greenhouse Gas Protocol); and • taking into account the *Australian Greenhouse Office Factors and Methods Workbook* (AGO, 2006), and the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (DEC, 2005). **Visual Impacts** – including but not limited to: • identify and evaluate the visual impacts of the project including an analysis of views from key vantage points and proposed management/mitigation measures to address the visual impact of the proposal. **Social and Economic Impacts-** including but not limited to: • potential social and economic impacts to the surrounding rural and regional communities including agricultural impacts to surrounding land affected by the project and impacts on community facilities as a result of the project.
Environmental Risk Analysis	Notwithstanding the above key assessment requirements, the EIS must include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of this additional key environmental impact must be included in the EIS.
Consultation	During the preparation of the EIS, you should undertake an appropriate and justified level of consultation with relevant parties, including (but not limited to): • local, State or Commonwealth government authorities and service providers, including the: - Department of Planning and Infrastructure (Hunter and Tamworth Regional Office); - Office of Environment and Heritage (Environmental Protection Authority and Heritage); - Hunter Central Rivers Catchment Management Authority; - Namoi Catchment Management Authority; - Transport for NSW; - Department of Trade and Investment (Primary Industries and Mineral Resources, and Office of Water); - Liverpool Plains Shire Council; and - Upper Hunter Shire Council. • service and infrastructure providers such as:

	- Roads and Maritime Services; - RailCorp; - Hunter Water; and - Hunter Energy. • specialist interest groups, including Local Aboriginal Land Councils; and • the public, including community groups and adjoining and affected landowners. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
Further consultation after 2 years	If you do not lodge an EIS for the project within 2 years of the issue date of these DGRs, you must consult with the Director-General in relation to the preparation of the EIS.