ORION NEW ZEALAND LTD

Notice of Requirement: Burnham Zone Substation

Site Address: Burnham School Road, Rolleston

Date: 5 May 2020

Document Control				
Report Title	Notice of Requirement			
Client	**Orion New Zealand Ltd**		**Client Contact/Approver**	Tessa Sutherland
Rev	**Date**	**Status**	**RMG Author**	**RMG Reviewer**
1	15/12/2019	Draft	Melanie Foote	Darryl Millar
2	20 January 2020	Final Draft	Melanie Foote	
3	4 April 2020	Final Draft	Melanie Foote	
4	5 May	Updated FINAL	Melanie Foote	
Current Rev		*4*		

Notice of Requirement: Burnham Zone Substation

to

Selwyn District Council

Resource Management Group Limited
Level 4, 69 Cambridge Terrace
PO Box 908
Christchurch Box Lobby

Christchurch 8140

Phone (03) 943 4112

NOTICE OF REQUIREMENT

PURSUANT TO SECTION 168 OF THE RESOURCE MANAGEMENT ACT 1991

To: **SELWYN DISTRICT COUNCIL**

From: **ORION NEW ZEALAND LIMITED**

Orion New Zealand Limited is a Requiring Authority pursuant to Section 167 of the Resource Management Act 1991.

Orion New Zealand Limited gives notice to the Selwyn District Council of a Requirement to designate land within the District as an Electricity Substation.

1. **The site to which the requirement applies is as follows:**

   Name: Burnham Zone Substation

   Address: Burnham School Road, Rolleston

   Legal Description: Lot 2 DP 492215, (Certificate of Title is contained in (**Appendix One)**

   Site Area: 0.5995ha

   The location of the site and the extent of the proposed designation are shown on the Plan contained in **Appendix Two**.

2. **The nature of the proposed work and the nature of any proposed conditions:** Refer to the attached Notice.

3. **The effect that the proposal will have on the environment and the ways in which any adverse effects wil be mitigated:** Refer to the attached Notice.

4. **Alternative sites, routes and methods considered:** Refer to the attached Notice.

5. **The public work and designation are reasonably necessary for achieving the objectives of Orion because:** Refer to the attached Notice.

6. **Consultation with parties likely to be affected**: Refer to the attached Notice.

Signed by the person authorised to sign on behalf of the person giving notice

Melanie Foote

Senior Consultant Planner

Resource Management Group Ltd

On behalf of **Orion New Zealand Limited**

5 May 2020

Address for Service:

Orion New Zealand Limited
C/- Resource Management Group Limited
PO Box 908
Christchurch Box Lobby
CHRISTCHURCH 8140

Attention: Melanie Foote

Phone: (03) 962 1738
Email: melanie@rmgroup.co.nz

Address for Client:

Orion New Zealand Limited
PO Box 13896
CHRISTCHURCH 8141

Attention: Tessa Sutherland

Tessa.sutherland@oriongroup.co.nz

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Orion New Zealand Limited

Notice of Requirement: Burnham Zone Substation

Background and Reasons

1. Orion New Zealand Limited (Orion) owns and operates the electricity distribution network between the Waimakariri and Rakaia Rivers, and supplies lines services to over 200,000 customers within the Selwyn District and Christchurch City. Orion's core purpose is to consistently deliver a safe, secure and cost-effective supply of electricity. Orion plays a central role in the electricity industry, providing both essential support and lifeline services.

    - To ensure a safe, secure and resilient supply of electricity
    - To provide a network that is responsive to customer growth and demand
    - To enable flexibility of site design and development

2. Pursuant to Section 168 of the Resource Management Act 1991 (the Act), Orion gives notice of its requirement for the site described above to be designated within the Proposed Selwyn District Plan as part of the Selwyn District Plan Review process. The site is not currently designated in the operative District Plan. The designation will be for 'Electricity Substation' purposes (the notation). The designation notation for this site is aligned with Orion's existing designations in the operative Christchurch District Plan and as is sought to be rolled into the proposed Selwyn District Plan by Orion in its recently supplied clause 4 designation notice. The details of the designation sought is as follows:

Purpose	Site Name	Location	Legal Description	Planning Map	Operative District Plan Underlying Zone
Electricity Substation	Burnham Zone Substation	Burnham School Road	Lot 2 DP 492215	X	Rural Outer Plains

3. The site is owned by Orion but is undeveloped. It was purchased with the intention of constructing, in the future, a new substation to supply increased growth in the area and increase resiliency of the electricity distribution network. Orion considers that designating this site will provide more certainty with regard to long

term planning and to allow for a consistent planning approach across its operational geographic area and the network it operates within Selwyn and within Christchurch City. Future works on the site will be managed under the Outline Plan process pursuant to section 176A of the Act.

4. Pursuant to section 184(1(c) Orion requests a 10-year period to give effect to the designation.

   A site plan showing the location and spatial extent of the proposed designation sought is contained in **Appendix Two.**

5. The following resource consents relate to the site:

   - RC135455A: subdivision consent to create a utility lot.
   - RC155311: change conditions of RC1355455A

The Site and Surrounding Environment

6. The site is located on Burnham School Road at the western edge of Rolleston Township. The site is currently vacant and has an area of 0.5995ha and is legally described as Lot 2 DP 492215. There is no formed access to the site.

7. With regard to the surrounding area Rolleston township is located immediately to the east. West Rolleston Primary school is located to the northeast on the opposite side of Burnham School Road. Land immediately to the north is zoned Living 3, although it is currently in rural use. Land to the west and south is zoned Rural Outer plains.

8. Land to the west is zoned Living 2. The nearest residential unit is located at 75 Burnham School Road approximately 20m from the property boundary. In between this residential unit and the site is an access leg in from Burnham School Road to a site fronting Dunn's Crossing Road.

Description of Proposed Activity

9. The proposed designation is required to reflect the future substation and associated equipment proposed to be constructed on the site in the future. While details and timing of the future substation cannot be confirmed, future construction on the site is likely to comprise of a substation building, outdoor switchyard, associated equipment and transformers, landscaping, lighting, signage and fencing similar to other existing substations sites across the Selwyn District. Refer to the site plan contained in A**ppendix Two** for a plan showing the spatial extent of the site.

10. No works are currently proposed as part of this Notice. Should this Notice be confirmed, any future works proposed will be addressed via the Outline Plan procedures contained in s176A of the Act. This section of the Act places a statutory duty on Requiring Authorities to submit Outline Plans to territorial authorities for projects or works proposed on designated sites.

11. The future substation on this site will form an integral part of the electricity distribution network, increase resiliency and will provide capacity for growth in the area.

Access and Parking

12. There is currently no formed access to the site as the site is undeveloped. Any future access arrangements and associated on- site parking will form part of the Outline Plan that will be required for the future substation. It is intended that on-site vehicle parking will be provided when the site is developed to ensure Orion staff and

contractor vehicles are not required to park on the road.

Landscaping and Fencing

13. There is existing landscaping along the northeastern boundary only along with post and wire fencing along all boundaries. When the site is developed landscaping and fencing will be considered as part of the Outline Plan process.

Ongoing works

The designation regime of the Act recognises that sites and activities subject to a confirmed Notice of Requirement may continue to change and develop in response to demand and/or changed circumstances. Future development and construction of the substation works will be considered by the Council via the Outline Plan process of the Act. Section 176A of the Act places a statutory duty on Requiring Authorities to submit Outline Plan to territorial authorities for projects or works proposed on designated sites and such plans must show:

- The height, shape and bulk of the public work, project, or work;
- The location on the site of the public work, project or work; and
- The likely finished contour of the site; and
- The vehicular access, circulation, and the provision for parking; and
- The landscaping proposed; and
- Any other matters to avoid, remedy, or mitigate any adverse effects on the environment.

14. After considering an Outline Plan, the Territorial Authority is able to request changes. A right of appeal to the Environment Court exists should the Requiring Authority decline to make the changes sought.

15. The Outline Plan process enables a Territorial Authority to better ascertain the nature of the future development, which may not be known at the time a Requirement (such as this) is sought. More importantly, it prescribes a process to ensure that any adverse effects are addressed. The Outline Plan procedure provides a process and a level of assessment and control which ensures the effects of the development are considered on a case by case basis, rather than within the context of a set of broad-brush plan rules which may not be appropriate to the particular land use and setting.

Assessment of Effects on the Environment

16. This section considers the relevant effects that may result from the proposed designation and this includes the following matters:

- Noise;
- Parking and access;
- Landscape and visual effects;
- Electromagnetic fields (EMF);
- Wider rural amenity issues
- Construction phase works

- Effects on Social-Economic and Cultural Wellbeing.

Noise

17. Any operational noise effects will be addressed at the time an Outline Plan is submitted for approval for the development of the future substation on the site. It is expected that any noise arising from future activities on site will comply with the relevant District Plan standards. To provide certainty around noise, and in recognising the existing sensitive activities (school and residential activities) located nearby a proposed condition is proposed in paragraph 26.

Parking and Access

18. There is currently no formed access to the site. When the site is developed in the future access and associated on-site parking will be assessed as part of the Outline Plan process. It is noted given the size of the site there will be sufficient space on site to accommodate any future parking areas, and for associated manouvering of any service vehicles. It is intended that the site, once developed, will be largely unstaffed. Once constructed, it will generally be visited every 2-3 months for scheduled inspection, maintenance, construction works/planned upgrade purposes by Orion staff and contractors. These visits generally occur during the hours of 8am-5pm. The site will also be visited by Orion staff and contractors on a demand basis where required including in the event of an emergency. Therefore, vehicle movements and the frequency of visits and associated on-site parking requirements will be low.

Landscape and Visual Impacts

19. Any visual effects of the future substation will be addressed at the time an Outline Plan is submitted. However, it is noted that Orion deliberately chose a site large enough to accommodate the future substation activities, but also to provide space for areas of landscaping and setbacks from boundaries. It is noted that there is some existing tree planting along the northern boundary which would provide good screening.

Electromagnetic Fields (EMF)

20. The International Commission on Non-Ionising Radiation Protection (ICNIRP) have recommended for areas normally accessed by the public of 5,000 volts per metre for electric fields and 100 microtesla for magnetic fields. These recommendations were published in 1998, and are based on a review of health effects research and include a safety factor.

21. Any new future substation and associated equipment will be designed and constructed to comply with the required EMF standards. This will be addressed further as part of an Outline Plan process when the substation is developed in the future.

Amenity Issues

22. At a policy level the District Plan establishes a framework providing for utilities to be established throughout the district, while also recognising the environmental outcomes that the District Plan seeks. This recognises the significant role that utilities play in enabling people and communities to provide for their wellbeing and health and safety. The District Plan also seeks to ensure the effects of utilities are compatible with the amenity values and environmental characteristics of the rural zone in which it is located.

23. The future substation site is located on the edge of Rolleston township and will, therefore, be compatible with existing area. It is noted with regard to activity levels on the site, the nature of the future substation on the site is that it will be unstaffed, with visits to the site generally limited to scheduled inspection, maintenance, constructions works/planned upgrades purposes but also as required including in the event of an emergency. Further conditions have been proposed around the bulk and location of buildings and noise. Once developed the levels of activity on the site will be very low and consistent with both the adjoining residential zone and rural zone.

24. In summary, substations are typically located and anticipated in all zones throughout the district and are therefore not unexpected. Overall, any adverse effects associated with a future substation will be acceptable and controlled by proposed conditions.

Construction Phase Works

25. Any necessary construction phase consents will be sought, including those that may be required from Environment Canterbury, such as operational stormwater. It is noted standard erosion and sediment control guidelines and site management practices will be put in place during the construction phase.

Socio-Economic and Cultural Wellbeing

26. Utilities form an essential part of community infrastructure. The future Burnham Zone Substation on this site will provide for electricity distribution principally for surrounding area which supports the general socio-economic and cultural wellbeing of the community. The designation of the substation will provide for greater certainty in this respect. Rolleston has undertaken huge residential growth in the last few years and this future substation is required in order to supply electricity for the growth of the surrounding area and increase resiliency of the electricity distribution network.

Proposed Conditions

27. The following mitigation measures are recommended as conditions for the proposed designation which will give Council some assurance of future operations on the site, while also allowing Orion design flexibility for the future substation going forward.

    Note: The term “building” in the following conditions means a temporary or permanent moveable or immoveable physical construction that is: a. partially or fully roofed and b. fixed or located in or on land.

    Conditions a) and b) shall not apply to ancillary structures, electrical transformers, a fence or wall less than 2m in height, structures less than 10m^2 in area and less than 1.8m in height, temporary structures for maintenance and construction purposes, cables and associated ancillary fittings, lightning rods, masts, aerials, or antennae not exceeding 1.5m diameter.

    a) The height of any building shall not exceed 9m.

    b) Any building shall be setback a minimum of 10m from all site boundaries.

    c) Operational noise from the site measured at the notional boundary of any residential unit shall not exceed the following (excluding generators and any equipment used for emergency purposes, including testing and maintenance):

    Burnham: Maximum noise limits at any Living Zone boundary.

Hours	Noise Limit
7.00am – 10.00pm	55 dBA L_{AEQ}
10.00pm – 7.00am	45 dBA L_{AEQ}

    d) Radio frequency electromagnetic radiation emissions shall not exceed the exposure standards in NZS 2772.1 (1999), where members of the public may be exposed.

    e) Exposure to power frequency and magnetic fields in areas normally accessible to the public shall not exceed 100 micro teslas as measured and assessed in accordance with the International Commission on Non-Ionising Radiation Protection (ICNIRP) Guidelines.

    f) All works shall comply with Orion's Environmental Management Procedures for Hazardous Substances (document number NW70.10.02). (See copy in **Appendix Four**)

Effects Conclusion

28. A future substation on the site will supply electricity for the growth of the surrounding area and increase resiliency of the electricity distribution network. This will result in positive effects associated with socio-economic and cultural wellbeing of the community. The nature and scale of the future substation will be similar to other substations in the District and will be assessed as part of the Outline Plan process.

29. It is, therefore, considered that any adverse effects associated with this Notice would be acceptable given the proposed conditions and the ability of the Council to request changes relating to any matter under section 176A(3)(f) of the Act.

Statutory Considerations

Introduction

30. Section 171(1) of the Act sets out that when considering a notice, a Territorial Authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to:

    - Policy Statements and Plans;
    - Alternate sites, routes or methods;
    - Whether the work and designation are reasonably necessary;
    - Other matters.

31. The balance of this Notice considers the matters requiring consideration under section 171 of the Act.

Policy Statements and Plans

32. Section 171(1)(a) requires consideration of the relevant provisions of national policy statements, NZ coastal policy statement, regional policy statement, plan or proposed plan.

33. There are no national policy statements relevant to this proposal. Similarly, given the location of this site, the NZ Coastal Policy Statement has no application. This leaves consideration of the Canterbury Regional Policy Statement, Canterbury Regional Council Regional Plans and the Selwyn District Plan.

Canterbury Regional Policy Statement (CRPS)

34. The CRPS provides for a strong emphasis to be placed on regionally significant infrastructure, which includes the electricity distribution network. Both Chapter 5 – Land Use and Infrastructure and Chapter 6 Recovery and Rebuilding of Greater Christchurch are the relevant chapters and contain provisions for the 'entire region' and for the 'wider region' (that part of the region that lies beyond greater Christchurch). The site is located within Greater Christchurch and the relevant policies are outlined below:

5.2.1

Location, design and function of development (Entire Region)

Development is located and designed so that it functions in a way that:

1. *achieves consolidated, well designed and sustainable growth in and around existing urban areas as the primary focus for accommodating the region's growth; and*

2. *enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety; and which:*
    a. *maintains, and where appropriate, enhances the overall quality of the natural environment of the Canterbury region, including its coastal environment, outstanding natural features and landscapes, and natural values;*
    b. *provides sufficient housing choice to meet the region's housing needs;*
    c. *encourages sustainable economic development by enabling business activities in appropriate locations;*
    d. *minimises energy use and/or improves energy efficiency;*
    e. *enables rural activities that support the rural environment including primary production;*
    f. *is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure;*
    g. *avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, and where avoidance is impracticable, remedies or mitigates those effects on those resources and infrastructure;*
    h. *facilitates the establishment of papakāinga and marae; and*
    i. *avoids conflicts between incompatible activities.*

35. Objective 5.2.1 (for the entire region) directs that development is located and designed so that it functions in a way that, amongst other matters, "*enables rural activities that support the rural environment including primary production"* and "*is compatible with and will result in a continued and safe, efficient and effective use of regionally significant infrastructure*". It also seeks to avoid adverse effects on regionally significant infrastructure, and where avoidance is impracticable, remedy or mitigate those effects.

6.2.1 Recovery framework

Recovery, rebuilding and development are enabled within Greater Christchurch through a land use and infrastructure framework that:

1. *identifies priority areas for urban development within Greater Christchurch;*

2. *identifies Key Activity Centres which provide a focus for high quality, and, where appropriate, mixed-use development that incorporates the principles of good urban design;*

3. *avoids urban development outside of existing urban areas or greenfield priority areas for development, unless expressly provided for in the CRPS;*

4. *protects outstanding natural features and landscapes including those within the Port Hills from inappropriate subdivision, use and development;*

5. *protects and enhances indigenous biodiversity and public space;*

6. *maintains or improves the quantity and quality of water in groundwater aquifers and surface waterbodies, and quality of ambient air;*

7. *maintains the character and amenity of rural areas and settlements;*

8. *protects people from unacceptable risk from natural hazards and the effects of sea-level rise;*

9. *integrates strategic and other infrastructure and services with land use development;*

10. achieves development that does not adversely affect the efficient operation, use, development, appropriate upgrade, and future planning of strategic infrastructure and freight hubs;

11. optimises use of existing infrastructure; and

12. provides for development opportunities on Māori Reserves in Greater Christchurch.

36. Objective 6.2.1 sets out the recovery framework that includes a land and infrastructure framework that integrates strategic and other infrastructure along with servicing and land development in order to seek to optimise existing infrastructure. In relation to strategic infrastructure it seeks to achieve development that does not adversely affect the efficient operation, use and development, appropriate upgrade and future planning of strategic infrastructure.

6.3.5 Integration of land use and infrastructure

Recovery of Greater Christchurch is to be assisted by the integration of land use development with infrastructure by:

1. *Identifying priority areas for development to enable reliable forward planning for infrastructure development and delivery;*
2. *Ensuring that the nature, timing and sequencing of new development are co-ordinated with the development, funding, implementation and operation of transport and other infrastructure in order to:*
    a. *optimise the efficient and affordable provision of both the development and the infrastructure;*
    b. *maintain or enhance the operational effectiveness, viability and safety of existing and planned infrastructure;*
    c. *protect investment in existing and planned infrastructure; and*
    d. *ensure new development does not occur until provision for appropriate infrastructure is in place;*
3. *Providing that the efficient and effective functioning of infrastructure, including transport corridors, is maintained, and the ability to maintain and upgrade that infrastructure is retained;*
4. *Only providing for new development that does not affect the efficient operation, use, development, appropriate upgrading and safety of existing strategic infrastructure, including by avoiding noise sensitive activities within the 50dBA Ldn airport noise contour for Christchurch International Airport, unless the activity is within an existing residentially zoned urban area, residential greenfield area identified for Kaiapoi, or residential greenfield priority area identified in Map A (page 6-28); and*
5. *Managing the effects of land use activities on infrastructure, including avoiding activities that have the potential to limit the efficient and effective, provision, operation, maintenance or upgrade of strategic infrastructure and freight hubs.*

37. Policy 6.3.5 sets the framework for providing for infrastructure with a focus on urban growth and intensification and managed the associated effects on infrastructure including avoiding the activities that have the potential to limit the efficient and effective provision, operation, maintenance or upgrade of strategic infrastructure. In particular, subsections (3), (4) and (5) of the Policy are directly relevant, requiring that:

> "*Recovery of Greater Christchurch is to be assisted by the integration of land use development with infrastructure by:*
>
> *…*
>
> *(3) Providing that the efficient and effective functioning of infrastructure, including transport corridors, is maintained, and the ability to maintain and upgrade that infrastructure is retained;*
>
> *(4) Only providing for new development that does not affect the efficient operation, use, development, appropriate upgrading, and safety of existing strategic infrastructure…;*
>
> *(5) Managing the effects of land use activities on infrastructure including avoiding activities that have the potential to limit the efficient and effective provision, operation, maintenance or upgrade of strategic infrastructure and freight hubs.*"

38. The Notice is considered to be consistent with the CRPS, as it contributes towards providing for a reliable and resilient electricity distribution network.

Regional Plans

39. The Canterbury Land and Water Regional Plan (LWRP) do not contains any specific provisions relating to infrastructure, however there are relevant provisions relating to construction phase development of the site such as stormwater. It is noted that such requirements cannot be determined until site development and the necessary consents will be sought at the time.

Operative Selwyn District Plan

40. The site is located within the Rural Outer Plains zone of the Selwyn District Plan. The relevant planning map is contained in **Appendix Three**.

Part 5 of the Selwyn District Plan is specific to utilities in rural zones. Utilities are defined as follows:

> *Utility:*
>
> *includes the use of any structure, building or land for any of the following purposes:*
> *(a) The generation, transformation and/or transmission of energy;*
> *(b) Any telecommunication facility or telecommunication line;*
> *(c)Any radio communication facility;*
> *(d)The conveyance, storage, treatment or distribution of water for supply, including (but not limited to) irrigation and stockwater;*
> *(e) The drainage, reticulation or treatment of stormwater, waste water or sewage;*
> *(f) Transportation infrastructure, including (but not limited to) roads, accessways, railways, airports and navigational aids;*
> *(g) Work to mitigate potential natural hazards, including (but not limited to) stopbanks, groynes and gabions; or*
> *(h) Meteorological facilities for the observation, recording and communication of weather information.*

41. Part 5 of the District Plan also includes rules specific to utilities. It is noted that the future establishment of the substation and construction of the associated infrastructure is likely to be a permitted activity subject to compliance with earthworks standards and bulk and location standards. Although it is noted the new District Plan will be notified next year so the current planning regime will change.

42. The Selwyn District Plan contains objectives and policies relating to utilities. Those relevant to this Notice and the Burnham Zone Substation are as follows:

> *Objective B2.2.1*
>
> *Utilities are recognised as essential tools for people's economic and social well-being, and to mitigate effects of other activities, on the environment.*
>
> *Objective B2.2.2*
>
> *The provision of utilities where any adverse effects on the environment and on people's health, safety and wellbeing is managed having regard to the scale, appearance, location and operational requirements of utilities.*
>
> *Policy B2.2.2*
>
> *Ensure provision is made for the ongoing maintenance and repair of utilities which are not vested in the Council, and that the users of these utilities are informed of any responsibility they have for ongoing maintenance or repair.*
>
> *Policy B2.2.3*

Avoid potential reverse sensitivity effects of activities on the efficient operation development, use and maintenance of established utilities.

Policy B2.2.5(a)
Avoid siting utility structures or buildings on hilltops in the margins of lakes or rivers or in areas identified as outstanding natural features and landscapes, sites with special cultural values (Silent File Areas, Wāhi Taonga Sites and Management Areas or Mahinga Kai Sites) or Heritage Sites in the Plan, unless operational necessity makes this impractical.

Policy B2.2.5(b)
Where not practical mitigate any adverse effects of the utility, and of any access road or ancillary features, on the landscape values of the area.

Policy B2.2.6
Require utility structures to be made of low reflective materials.

Policy B2.2.7
Encourage the co-siting of utilities, where practical.

Policy B2.2.9
Encourage utilities located in road reserves to be installed, maintained and replaced with minimal adverse effects on traffic safety or flow.

Policy B2.2.10

Enable the provision of utility networks that serve extensive areas to be located in rural areas commensurate with operational requirements.

43. The general premise of the above objectives and policies is to recognise the essential nature of the utilities and the 'public good' which results from their provision. This is balanced, however, with the need to ensure the resulting environmental effects are acceptable. Preceding assessments have determined that this will be the case, given, the proposed designation conditions and the requirement to submit and Outline Plan for any future works.

44. Overall, it is concluded that this Notice is aligned with the objectives and policies of the Selwyn District Plan.

Alternate Sites, Routes or Methods

45. Section 171(1)(b) reads:

'Whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if
(i) the requiring authority does not have an interest in land sufficient for undertaking the work; or
(ii) (ii) it is likely that the work will have a significant adverse effect on the environment.'

46. The driving force behind this proposed designation is to address the growth in electricity demand in the area and to ensure security of supply. There are no alternative methods to achieving this, other than to construct a new substation in the future. Therefore, the consideration of alternative methods routes or methods is not relevant. Consequently, the only potential alternative for consideration relates to that of alternative sites. In this context Orion already own this site and the preceding assessment has determined that any actual or potential effects will acceptable.

47. That aside, Orion's consideration of site choice has been influenced by the strategic location of the site to be able to effectively integrate with the wider electricity distribution network.

Reasonably Necessary

48. Section 171(1)(c) reads:

> *'whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought.'*

49. There are two parts to this assessment; being the need for:

- the work; and
- the designation as a planning tool.

50. The reasons for the proposed substation have been outlined earlier and, within this context, it is not proposed to discuss the issue further. That said, it is important to note that the Act refers to whether the designation is *"reasonably necessary"*. This clearly indicates that it is not required to demonstrate that the designation is "necessary" – rather it only has to be reasonably necessary, and this is a lesser test. Moreover, it occurs within the consideration of the wider section 171 context of having a *"particular regard"* to the matter – rather than a requirement. For completeness, this framework of consideration also applies to the matter of whether the designation as a planning tool is appropriate.

51. It is considered that the designation, as a planning tool, is reasonably necessary to assist Orion in achieving their core purpose to consistently deliver safe a, secure and cost-effective supply of electricity.

52. The alternatives to a designation are:

a. Reliance on the District Plan rules; or
b. Resource consent.

53. The District Plan rules and the consent process do not provide a long-term planning tool to effectively and efficiently address the ongoing operation and any potential future development of the site. Given the long-term nature of this facility, and the prospect that site augmentation may be required in the future following its establishment, the designation regime is the only long term planning tool able to address these issues. This is a fundamental reason why Requiring Authorities make use of the designation regime as a planning tool and why the provisions exist within the legislation.

54. In essence there are process and consistency issues associated with reliance on Plan rules or resource consent pathways. As noted earlier, Orion's network is located across two Districts, each with differing Plan provisions. The designation regime overcomes the potentially inherent process and inconsistency issues that arise in such circumstances.

55. The Environment Court considered the issue of need, amongst a raft of other issues, in its decision on an Appeal by the Christchurch City Council opposing the Minister of Education's decision to designate state sector school sites. In that case (*Christchurch City Council v Ministry of Education (C130/2003))* the Court found that:

> *"… … we conclude that designation holds a significant number of benefits for the Minister in this case and that it is the preferable planning method to be utilised for the reasons set out in the decision of the Court in* ***Takamore Trustees*** *paragraphs 140 – 143 and in particular:*
>
> *(a) It signals the potential for future changes on the site;*
>
> *(b) It provides a clear methodology for such changes to occur (the outline plan procedure);*

(c) It provides a uniform approach throughout many different districts, particularly for the Minister;

(d) That the existing uses are well established;

(e) That the necessity for change is unequivocal. It is clear that both education requirements and student numbers change regularly;

(f) It is not possible to freeze the existing position in terms of plan provisions."

The Court went on to conclude that:

"In the alternative, designation better meets the sustainable management purposes of the Act."

56. While that case dealt with the application of designation to the Minister of Education's property portfolio, the reasons behind the appropriateness of the designation as a planning tool are equally applicable to this proposal. This is particularly so when considered in the context of a *"uniform approach"* argument to managing Orion's other strategic assets.

57. Consequently, it is considered that the designation is *'reasonably necessary"* to achieve the objectives of the Requiring Authority.

Other Matters

58. Section 171(1)(d) reads:

> *'any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.'*

59. There are no other matters considered reasonably necessary to make a decision on this Notice.

Consultation

60. Orion has undertaken preliminary consultation regarding the Notice with Selwyn District Council. No other consultation has been undertaken on the basis that the proposed conditions and future Outline Plan would ensure any adverse effects would be less than minor.

Conclusion

61. Orion gives notice of its requirement to designated land for the future Burnham Zone Substation. The designation is for 'Electricity Substation' purposes and will enable the future development of the site to form part of the wider electricity distribution network. No works are proposed in association with this Notice.

62. The preceding assessment of effects concludes that the effects associated with this designation would be acceptable given the proposed conditions and Outline Plan requirement for future works. It is considered that the Notice and designation are not inconsistent with relevant statutory provisions.

63. The use of the designation as a planning tool is considered reasonably necessary to achieve Orion's core purpose and objectives listed earlier for this site.

64. Given this, it is considered that the designation and the Notice are consistent with the purpose and principles of the Act and should proceed.

Appendix One: Computer Freehold Register

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**715357**
Land Registration District	**Canterbury**
Date Issued	02 November 2015

Prior References
CB32K/1013

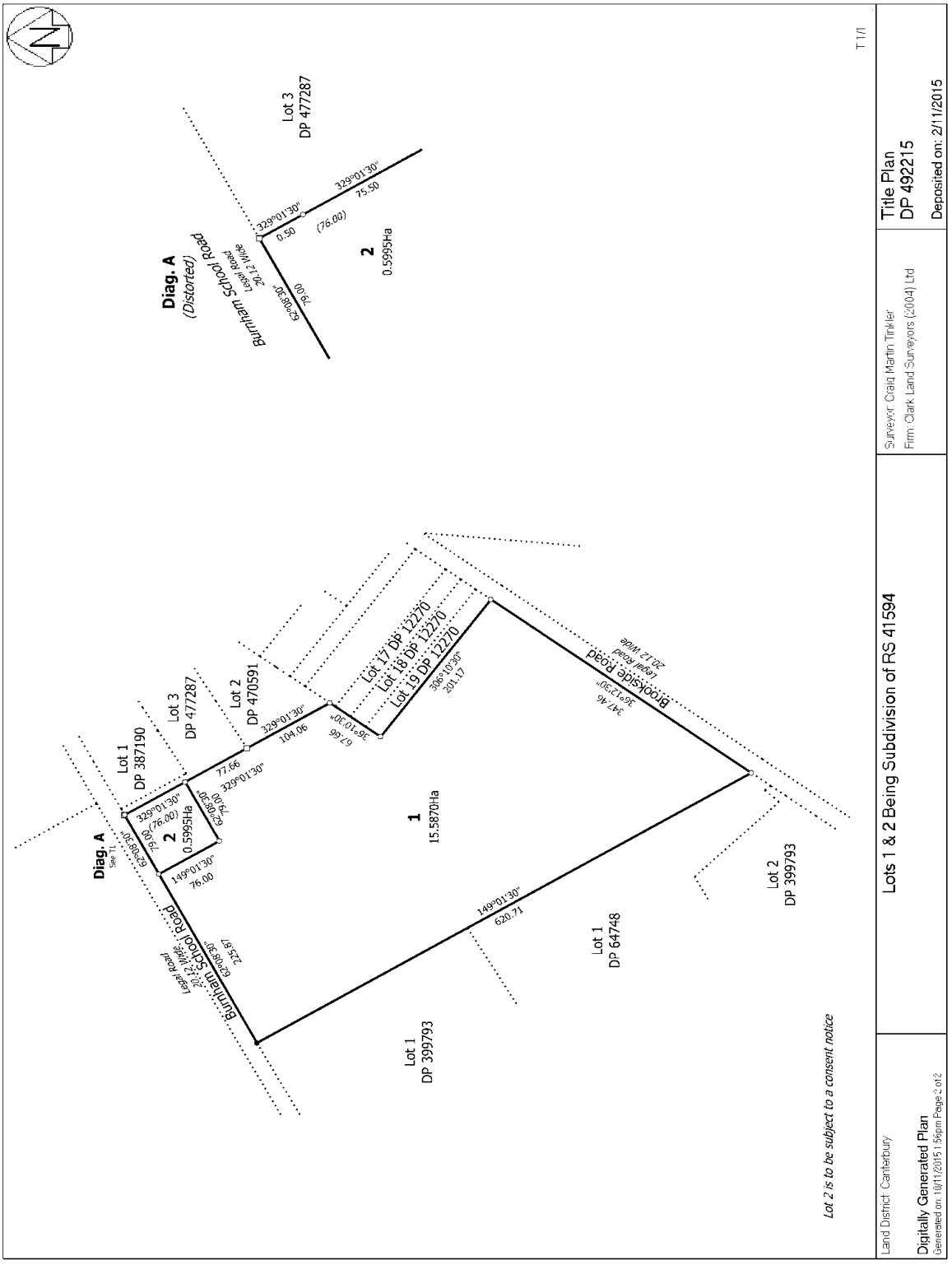
Estate	Fee Simple
Area	5995 square metres more or less
Legal Description	Lot 2 Deposited Plan 492215

Registered Owners
Orion New Zealand Limited

Interests

10236997.2 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 2.11.2015 at 3:20 pm

Identifier **715357**



View Instrument Details

Instrument No.	10236997.2
Status	Registered
Date & Time Lodged	02 Nov 2015 15:20
Lodged By	Hunt, Lillee May Reid
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991

Affected Computer Registers	Land District
715357	Canterbury

Annexure Schedule: Contains 1 Page.

Signature

Signed by Stephanie Elizabeth Muller as Territorial Authority Representative on 30/10/2015 11:07 AM

***** End of Report *****

Selwyn DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Resource Consent 155490

CONSENT NOTICE PURSUANT TO SECTION 221 RESOURCE MANAGEMENT ACT 1991

To: The District Land Registrar
Canterbury Land Registration District

TAKE NOTICE that the land hereinafter described is subject to conditions in relation to a subdivision consent as follows:-

"That Lot 2 DP 492215 shall be used for the purpose of a utility lot only, and may not be utilised for the purpose of contributing to any future calculation of dwelling density and/or lot size calculation and/or any future boundary adjustment under the rules of the District Plan."

AND THAT you are hereby requested to register the same pursuant to Section 221 of the Resource Management Act 1991.

DESCRIPTION OF LAND

All that piece of land being Lot 2 DP 492215 held in Computer Freehold Register 715357

DATED this 28th day of October 2015

SIGNED for and on behalf of
THE SELWYN DISTRICT COUNCIL

Authorised Officer

www.selwyn.govt.nz
Selwyn District Council, 2 Norman Kirk Drive Rolleston /PO Box 90, Rolleston 7643
Tel: 03 347 2800 Fax: 03 347 2799 Email: admin@selwyn.govt.nz

Appendix Two: Site Plan

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

Proposed Orion NZ Limited Designation - Burnham Zone Substation

N

0 0 0 0 0 Kilometres

Scale: 1:1,000 @A4

Map Created by Canterbury Maps on 8/10/2019 at 1:48 PM

Appendix Three: Designation Table for Insertion

ORION-XX Burnham Zone Substation

Burnham Zone Substation	
Designation unique identifier	ORION-XX
Designation purpose	Electricity Zone Substation
Site identifier	Burnham School Road Lot 2 DP 492215
Lapse date	
Designation hierarchy under section 177 of the Resource Management Act	Primary
Conditions	Yes
Additional Information	

ORION-11 Conditions

Note: The term “building” in the following conditions means a temporary or permanent moveable or immoveable physical construction that is a. partially or fully roofed; and b. fixed or located in or on land.

Conditions 1 and 2 shall not apply to any: ancillary structure, electrical transformers, a fence or wall less than 2m in height, structures less than 10m^2 in area and less than 1.8m in height, temporary structures for maintenance and construction purposes, cables and associated ancillary fittings, lightning rods, masts, aerials, or antennae not exceeding 1.5m diameter.

1. The height of any building shall not exceed 9m.

2. Any building shall be setback a minimum of 10m from all site boundaries.

3. Operational noise from the site measured at the notional boundary of any residential unit shall not exceed the following (excluding generators and any equipment used for emergency purposes, including testing and maintenance):

   Burnham: Maximum noise limits at any Living Zone boundary.

Hours	Noise Limit
7.00am – 10.00pm	55 dBA L_{AEQ}
10.00pm – 7.00am	45 dBA L_{AEQ}

4. Radio frequency electromagnetic radiation emissions shall not exceed the exposure standards in NZS 2772.1 (1999), where members of the public may be exposed.

5. Exposure to power frequency and magnetic fields in areas normally accessible to the public shall not exceed 100 micro teslas as measured and assessed in accordance with the International Commission on Non-Ionising Radiation Protection (ICNIRP) Guidelines.

6. All works shall comply with Orion's Environmental Management Procedures for Hazardous Substances (document number NW70.10.02).

APPENDIX FOUR: Orions Environmental Procedures for Hazardous Substances (Document No.NW70.10.02)

ENVIRONMENTAL MANAGEMENT PROCEDURES FOR HAZARDOUS SUBSTANCES

INFRASTRUCTURE MANAGEMENT
ELECTRICITY NETWORK PROCEDURE
NW70.10.02

AMENDMENT 13

DETAILS OF DOCUMENT AMENDMENT			
Amendment	**Section Amended**	**Description of Amendment**	**Issue Date**
13	Title	Change of title from Environmental Management Procedures for Oil and Fuel.	01.02.17
	2	New section: Hazardous Substances as a Risk	
	3	New section: Work Involving Hazardous Substances Procedures relate to any personnel working with hazardous substances (which includes oil and fuel).	
	4	Inclusion of a reference to SF6 Gas and Asbestos and their associated procedures/guidelines (Asbestos Management Guidelines due to be released in 2017).	
	4.3.1	Timeframe for spill reports for uncontained spills to be completed and sent to the Orion Contract Manager (by the end of the next working day after the cleanup). Spill report information requirements now include amount of any soil removed, evidence of appropriate disposal and photos of reinstatement.	
	Appendix A	New Appendix: Default Inspection and Maintenance Intervals for oil containment, interception and catchment facilities at Orion Zone Substations.	
	Appendix B1	Revised and new inspection and maintenance procedures for oil containment, interception and catchment facilities at Orion Zone Substations.	
	All	Minor wording changes	

The latest amendments are marked with a vertical line against the left margin. New text is red and removed text that has been left for clarity is ~~green~~.

DOCUMENT APPROVAL

APPROVED BY: Shane Watson

APPROVED DATE: 01.02.17

NEXT REVIEW DUE: 01.02.20

TABLE OF CONTENTS

1. PURPOSE

The purpose of these procedures is to ensure that hazardous substances are safely managed to protect the environment and the health and safety of people.

Specifically, this document contains the requirements for managing the risk associated with hazardous substances contained within, used for the operation of, or work on Orion NZ Limited's electricity network assets. This includes insulating oil, fuel, solvents, paints and pesticides.

This document should be considered a minimum requirement and may need to be tailored to meet individual needs.

2. HAZARDOUS SUBSTANCES AS A RISK

A substance is typically considered hazardous if it has one or more of the following hazardous properties:

- Explosive
- Flammable
- Oxidises (can accelerate a fire)
- Corrosive
- Toxic to people
- Toxic to the environment
- A substance that has the above properties when it gets wet or is exposed to air

These procedures also apply to oils that are not technically classified as a hazardous substance according to any current New Zealand legislation but may still cause harm on the environment or the health and safety of people from an uncontained spill.

3. WORK INVOLVING HAZARDOUS SUBSTANCES

Hazardous substances can be safely managed through effective controls and responsible management.

Personnel involved in the handling, storing, transporting, transferring and disposing of hazardous substances must have a management system in place in accordance with:

- Relevant Legislation (see Register of Legal and Other Requirements) – in particular the Hazardous Substances Regulations;
- Local council requirements including individual site discharge resource consents;
- Any required training and competency, including knowledge of the hazards associated with the substance they are working with and the appropriate management controls (e.g. personal protective equipment);
- Safety data sheets (provide information on the hazards of a substance and management controls)
- A response plan for incidents, appropriate to the nature and amount of the hazardous substance, and including the relevant actions in these procedures;
- The minimum requirements set out in these procedures.

4. MANAGEMENT OF HAZARDOUS SUBSTANCES

4.1 GENERAL

The management procedures detailed in this document are based on risk assessments surrounding the hazardous substances we use at Orion. Relative risk has been assessed based on the likelihood and consequence of events. The consequences are more significant where the holdings of hazardous substances are greater. The likelihood of an event has been deemed higher when hazardous substances are being transported or handled (i.e. pumped for filling or treating). A description of the management of

the primary hazardous substances contained within, or used for the operation of, the Orion network is given below.

4.1.1 Insulating oil

We use insulating oil in a range of electrical equipment including transformers, switchgear and some oil filled circuit breakers. Polychlorinated biphenyls (PCBs) were removed from the network in the late 1990s.

All transformers installed in our network containing greater than 1500 litres of oil (e.g. at zone substations) require a form of spill containment, in most cases this is a form of bunding. Bunding requires a discharge of water for which we either have council permission for the discharge into the reticulated stormwater network, or a resource consent (permit). These consents are based on management of the discharge in accordance with these management procedures - refer to the inspection and maintenance requirements in Routine Plan B1 in Appendix B.

The associated risk of transformer installations with smaller quantities of oil is managed on a site by site basis. However, we mitigate the risk by ensuring a quick response to an event. Refer to the Spill and Emergency Response section below.

4.1.2 Diesel fuel

We store diesel on some of our sites to fuel generators for peak electricity network demand or emergency backup. The generator's fuel storage tanks range in size from approximately 1500 litres to 15,000 litres. These meet current best practise designs that include double skinned tanks, additional secondary containment in the form of bunding where required and fuel sensor alarms which are also connected to Orion's network monitoring system (SCADA) and/or visually inspected on a regular basis. Diesel may also be stored at a transitional facility. Refer to the Routine Plans B2, B3 and B4 in Appendix B.

4.1.3 SF6 gas

SF_6 gas is used as an insulating medium, mainly in the majority of the 66kV circuit breakers in our network. Regular inspections and maintenance is undertaken to prevent loss of gas – refer to the SF6 Gas Management Procedures (NW70.10.01).

4.1.4 Asbestos

Asbestos was used in products for insulation, fireproofing and other purposes. Exposure risk is mainly from breathing in airborne fibres from asbestos that is disturbed by invasive works or is in poor condition. The potential for airborne fibres can be mitigated by effective controls and responsible management – refer to the Asbestos Management Guidelines (NW70.10.25).

4.2 TRANSITIONAL FACILITIES, TRANSPORTING AND HANDLING

Transitional facilities for storage or use, transporting and handling of hazardous substances, including where contained within electrical equipment, requires adequate planning to ensure appropriate mitigation and response procedures are in place. Refer to the Routine Plans B3, B4, B5 and B6 in Appendix B.

Orion contracts out the storage of transformers stock. The transformers are required to be appropriately restrained and stored to ensure they are not at risk of damage through handling or other events (e.g. a seismic event).

4.3 SPILL AND EMERGENCY RESPONSE

A spill or loss of a hazardous substance, particularly uncontained, can cause environmental harm or harm to the health and safety of people. A standard spill management procedure is included with each of the Routine Plans and Safety Data Sheets also provide information on emergency preparedness.

Our network operators are required to carry spill kits and we also have requirements with our emergency and inspection contractors to ensure appropriate spill kits are readily available to manage

any spills or losses. Details on spill kits are in Appendix C.

There is an Environmental Emergency Response Plan in Appendix D for major, uncontained spills or where a hazardous substance enters a waterway. A major, uncontained spill means one where there is a substantial amount spilled and external assistance is required to contain and/or clean it up.

See the Spill Response Flowchart in Appendix E for an overview of the process.

A response procedure to other emergencies involving hazardous substances that may occur (e.g. a fire) must also be in place.

4.3.1 Reporting

A review and analysis of spills is required for us to improve our processes. Any uncontained spills of a hazardous substance are required to be reported to Orion using the form in Appendix F and by the end of the next working day after the cleanup.

APPENDICES

The standards and procedures are organised into six Appendices to this document as follows:

Appendix A Default Inspection and Maintenance Intervals

Appendix B Routine Plans

B1. Standard inspection and maintenance procedures for oil containment (bunding), interception and catchment facilities

B2. Diesel powered generators

B3. Oil/fuel holding tanks

B4. Transportation of oil filled equipment

B5. Portable oil/fuel tanks or drums

B6. Oil filled equipment e.g. transformers, switchgear, cables etc.

Appendix C Spill Response Kit Contents

C1. Sports bag kits

C2. Major response kits

C3. Diesel fuel absorbent sock kit

Appendix D Orion Environmental Emergency Response Plan

Appendix E Spill Response Flowchart

Appendix F Spill Report

APPENDIX A: DEFAULT INSPECTION AND MAINTENANCE INTERVALS

DEFAULT INSPECTION AND MAINTENANCE INTERVALS

Default inspection and maintenance intervals have been provided for the transformer oil containment (bunding), interception and catchment facilities at zone substations - see Table 1 below. Inspection and maintenance forms will be supplied by Orion as part of the contract.

TABLE 1: DEFAULT INSPECTION AND MAINTENANCE INTERVALS

SERVICE CODE	DESCRIPTION	DEFAULT INTERVALS	ZONE SUBSTATIONS
EM01	Emptying water from bunded areas	2 monthly*	Refer to list provided
EM02	Inspection and routine maintenance of oil containment (bunding), oil interceptors and oil catchment tanks.	2 monthly*	Refer to list provided
EM03	Maintenance of oil interceptors (Ecostops)	6 monthly*	Refer to list provided
EM04	Maintenance of oil catchment tanks and oil interceptors	Yearly*	Addington, Papanui and Springston
SITE SPECIFIC REQUIREMENTS			
EM05	Inspection and maintenance of 11kV switchgear building oil interception and stormwater system (EcoAID)	6 monthly	Bromley
EM06	Discharge water test for total petroleum hydrocarbons	2 yearly	Addington
EM07	Representative soil sample from soakage basin	10 yearly	Waimakariri

*Default intervals are above, however an emergency works job may be issued by Orion for an immediate inspection (e.g. where the SCADA alarm has been activated).

APPENDIX B: ROUTINE PLANS

ROUTINE PLAN

B1. STANDARD INSPECTION AND MAINTENANCE PROCEDURES FOR OIL CONTAINMENT (BUNDING), INTERCEPTION AND CATCHMENT FACILITIES

EMPTYING WATER FROM BUNDED AREAS

SERVICE CODE	DESCRIPTION	DEFAULT INTERVALS
EM01	Emptying water from bunded areas	2 monthly

Zone Substations: Annat, Armagh, Bankside, Barnett Park, Brookside, Bromley, Dallington, Darfield, Diamond Harbour, Duvauchelle, Fendalton, Greendale, Halswell, Harewood, Hawthornden, Heathcote, Highfield, Hills Road, Hoon Hay, Hornby (including transformer storage bunded area), Hororata, Killinchy, Lincoln, McFaddens, Milton, Moffett, Oxford-Tuam, Rolleston, Shands, Te Pirita, Teddington

1. Check the groundwater table level via the vent pipe protruding out of the sump trench.

1a. If it is lower than the minimum depth for that substation in Table 2 below, where given, go to Step 2.

1b. If it is higher than the minimum depth for that substation in Table 2 below, do not empty the bunded area. Notify the Orion Contract Manager (a waste management specialist will be contacted to carry out the appropriate action).

2. To empty bund, check surface of water for signs of oil to determine correct actions:
(Note: A sheen is observed as a difference in the reflection of light on the surface of the water. If a slick is present, the colour of the transformer oil will be visible)

2a. **Actions for No Sign of Oil**

- Remove sump cover and open valve fully until water has drained
- Close and lock valve
- Cover sump

2b. **Actions for Presence of Oil Sheen**

- Remove sump cover and open valve to position ‘1’ to slowly drain stormwater until water is removed
- Use an absorbent pad or cushion to remove any sheen which has accumulated on the surface of the water in the sump. Remove mop-up material from site and dispose of to a facility authorised to receive it
- Close and lock valve
- Cover sump

2c. **Actions for Presence of Oil Slick**

- Do not remove water, notify the Orion Contract Manager immediately (a waste management specialist will be contacted to carry out the appropriate action).

TABLE 2: GROUND WATER TABLE LEVELS

Substation	Minimum depth	Substation	Minimum depth
Annat	800mm	Hornby	1200mm
Bankside	700mm	Hororata	700mm
Brookside	600mm	Moffett	800mm
Darfield	700mm	Rolleston T1	900mm
Diamond Harbour	700mm	Rolleston T2	700mm
Harewood	900mm	Shands Rd	700mm
Hills Rd	700mm	Springston	700mm

OIL CONTAINMENT (BUNDING), OIL INTERCEPTORS AND OIL CATCHMENT TANKS

SERVICE CODE	DESCRIPTION	DEFAULT INTERVALS
EM02	Inspection and routine maintenance of oil containment (bunding), oil interceptors and oil catchment tanks.	2 monthly

OIL CONTAINMENT (BUNDING)

Zone Substations: All (including transformer bunded storage area at Hornby)

1. Check for presence of oil in bunded area (where not already completed).

1a. Where an oil sheen is present, use an absorbent pad or cushion to remove any sheen which has accumulated on the surface of the water in the sump. Remove mop-up material from site and dispose of to a facility authorised to receive it.

1b. Where oil slick is present, notify the Orion Contract Manager immediately (a waste management specialist will be contacted to carry out the appropriate action).

2. Check bunding is secure.

3. Check bunded area is clear of all debris wet or dry and sweep clean if dry, including debris and obstacles removed.

4. Clear silt and debris accumulated in sump.

5. Where appropriate, check that there is a minimum of 200mm of water above the bund sump outlet to the drainage/soakage trench (in the sump pit if bunded area is empty). If not, fill the sump with clean water.

6. Where present, check the water level switch on the bund that activates the alarm is at least 50mm below the upper transformer pad.

7. Check water level switch and SCADA alarm is operational.

8. Check pumps are operational (Bromley only).

9. Check all valves, pipework and bolted or clamped fluid joints are secure and free of leaks.

OIL INTERCEPTORS

Zone Substations: Dunsandel, Kimberley, Lancaster, Larcomb, Little River, Middleton, Motukarara, Prebbleton, Rawhiti, Sockburn, Waimakariri, Weedons

1. Check oil interceptor is free of visible hydrocarbons. Where present, notify the Orion Contract Manager by the end of the working day (a waste management specialist will be contacted to carry out the appropriate action).

2. Measure accumulated sediment/grit at bottom of interceptor.

2a. Where accumulated sediment/grit it is greater than 200mm in depth, notify the Orion Contract Manager (a waste management specialist will be contacted to carry out the appropriate action).

OIL INTERCEPTORS AND OIL CATCHMENT TANKS

Zone Substations: Addington, Papanui and Springston

Notes: There should be no entry into oil interceptors or catchment tanks unless a confined space assessment has been carried out and the Orion Contract Manager is notified.

Addington and Papanui have open control valves which need to be manually closed in the event of a spill (at Addington these are located on transformers T2 and T3 only; other bunded areas here require the use of absorbent material to protect the stormwater drains).

1. Check oil catchment tanks and oil interceptors are free of debris and visible hydrocarbons. Where present, notify the Orion Contract Manager (a waste management specialist will be contacted to carry out the appropriate action).

2. Check for damage or deterioration. Where present, notify the Orion Contract Manager.

MAINTENANCE PROCEDURE OF OIL INTERCEPTORS (ECOSTOPS)

SERVICE CODE	DESCRIPTION	DEFAULT INTERVALS
EM03	Maintenance of oil interceptors (Ecostops)	6 monthly

Zone Substations: Dunsandel, Kimberley, Lancaster, Larcomb, Little River, Middleton, Motukarara, Prebbleton, Rawhiti, Sockburn, Waimakariri, Weedons

1. Maintain oil interceptor as per manufacturers instructions (will be supplied by Orion as part of the contract).

MAINTENANCE PROCEDURE OF OIL INTERCEPTORS AND OIL CATCHMENT TANKS

SERVICE CODE	DESCRIPTION	DEFAULT INTERVALS
EM04	Maintenance of oil catchment tanks and oil interceptors	Yearly

Zone Substations: Addington, Papanui and Springston

Notes: There should be no entry into oil interceptors or catchment tanks unless a confined space assessment has been carried out and the Orion Contract Manager is notified.

The isolation valves on the stormwater drainage outlets of transformer bunds of T2 and T3 at the Addington Zone Substation shall be closed during maintenance.

A GENERAL

Check and maintain as required:

1. Any corrosion, wear or mechanical damage.
2. Paint is free of cracking, peeling, delamination, rust spots and blistering.
3. Galvanising free of flaking and pinhead rusting.
4. Concrete tanks, walls, foundations, pads and kerbs damage and deterioration.
5. Covers, grates, access panels, and ladders in place and secure.
6. Seismic restraints, support structures and all holding down bolts secure. Anti-vibration systems in place and operate as intended.
7. Drains, traps and associated pipework free of blockages, debris and silt.
8. Valves left in service position; operate correctly and freely.

B OIL CATCHMENT TANKS AND INTERCEPTORS

Check and maintain as required:

1. Oil catchment tanks and interceptors are free of accumulated sediment and excessive bottom sludge.
2. Drainage pumps operate free from excessive noise, vibration or heat generation both on start-up and under steady state running.
3. All pumps, valves, pipework and bolted or clamped fluid joints secure and free of leaks.
4. Strainers are clean.
5. Oil level indicator and breather operating correctly.

SITE SPECIFIC REQUIREMENTS

SERVICE CODE	DESCRIPTION	DEFAULT INTERVALS
EM05	Inspection and maintenance of 11kV switchgear building oil interception and stormwater system (EcoAID)	6 monthly

Zone Substations: Bromley

1. Check for presence of oil in sump.

1a. Where an oil sheen is present, use an absorbent pad or cushion to remove any sheen which has accumulated on the surface of the water in the sump. Remove mop-up material from site and dispose of to a facility authorised to receive it.

1b. Where oil slick is present, notify the Orion Contract Manager immediately (a waste management specialist will be contacted to carry out the appropriate action).

2. Clear silt and debris accumulated in sump.

3. Maintain the EcoAID as per manufacturer's instructions (will be supplied by Orion as part of the contract).

SERVICE CODE	DESCRIPTION	DEFAULT INTERVALS
EM06	Discharge water test for total petroleum hydrocarbons	2 yearly

Zone Substations: Addington

1. The discharge from the American Petroleum Interceptor shall be sampled at the sampling point by a suitably qualified person for total petroleum hydrocarbons. The test results shall be forwarded to the Orion Contract Manager.

SERVICE CODE	DESCRIPTION	DEFAULT INTERVALS
EM07	Representative soil sample from soakage basin	10 yearly

Zone Substations: Waimakariri

1. A representative soil sample from the soakage basin shall be undertake in accordance with the specified criteria of the resource consent (will be supplied by Orion) and test results forwarded to the Orion Contract Manager.

ROUTINE PLAN

B2. DIESEL POWERED GENERATORS

OPERATION

* Establish adequate security.
* If the site is left unattended, the Site Supervisor is to check all valves are in the correct operating position.
* Have an appropriate spill kit readily available to manage any spills or losses.

SPILL MANAGEMENT

* Ensure personnel are safe.
* Remove anything that may lead to further damage.
* Ensure all potential sources of ignition are kept away from spill, including vehicles.
* Stop or limit the flow of fuel from the generator.
* Stop or limit the flow of fuel into any stormwater drain or waterway by bunding with mop material.
* Spread mop-up material over effected area to absorb fuel.
* Remove mop-up material from site and dispose of to an appropriate facility.
* If necessary, contact a waste management specialist (eg "Dakins") for containment and cleanup assistance.

IN THE EVENT OF A MAJOR UNCONTAINED SPILL OR OIL/FUEL ENTERING A WATERWAY, REFER TO THE ENVIRONMENTAL EMERGENCY RESPONSE PLAN (APPENDIX D).

REPORTING

* Report any issues (e.g. faulty equipment, recurring problems etc) to the Orion Contract Manager.
* Notify the Orion Contract Manager of any uncontained spill and complete and forward them a Spill Report (Appendix F) by the end of the next working day after the cleanup.

ROUTINE PLAN

B3. OIL/FUEL HOLDING TANKS

OPERATION

* Establish tank has adequate security and check bunding sump valves are closed.
* At the end of any working day Site Supervisor to check all tank valves are in the off position unless supervised by a nominated responsible person working after hours.
* Have an appropriate spill kit readily available to manage any spills or losses.
* Have a broom, shovel and container available and accessible at the depot for cleaning up mop-up material.
* Delivery docket to be signed by Orion personnel.
* Usage or withdrawals are monitored.
* Each type of fuel is to be balanced separately.
* Check bund alarm is operational.

SPILL MANAGEMENT

* Ensure personnel are safe.
* Remove anything that may lead to further damage.
* Stop or limit the flow from the holding tank or hose.
* Stop or limit the flow of oil/fuel into any stormwater drain or waterway by bunding with mop material.
* Spread mop-up material over effected area to absorb oil/fuel.
* Remove mop-up material from site and dispose of to an appropriate facility.
* If necessary, contact a waste management specialist (eg "Dakins") for containment and cleanup assistance.
* In the event of a bund alarm being activated, stop flow of oil or fuel and notify Orion Control (03 363 9890). They will arrange for internal or external assistance as needed.

IN THE EVENT OF A MAJOR UNCONTAINED SPILL OR OIL/FUEL ENTERING A WATERWAY, REFER TO THE ENVIRONMENTAL EMERGENCY RESPONSE PLAN (APPENDIX D).

REPORTING

* Report any issues (e.g. faulty equipment, recurring problems etc) to the Orion Contract Manager.
* Notify the Orion Contract Manager of any uncontained spill and complete and forward them a Spill Report (Appendix F) by the end of the next working day after the cleanup.

ROUTINE PLAN

B4. TRANSPORTATION OF OIL/FUEL FILLED EQUIPMENT

OPERATION

* Immediate Supervisor to establish Site Supervisor before starting journey of any oil or fuel in excess of 100 ltrs, e.g. 50 kVA transformer or larger.
* Site supervisor must establish equipment is adequately tied down and all valves and bungs are secure and mop-up kit is complete before journey.
* Have an appropriate spill kit readily available to manage any spills or losses.

SPILL MANAGEMENT

* Ensure personnel are safe.
* Remove anything that may lead to further damage.
* Stop or limit the flow from the equipment.
* Stop or limit the flow of oil/fuel into any stormwater drain or waterway.
* Spread mop-up material over effected area to absorb oil/fuel.
* Remove mop-up material from site and dispose of to an appropriate facility.
* If necessary, contact a waste management specialist (eg "Dakins") for containment and cleanup assistance.

IN THE EVENT OF A MAJOR UNCONTAINED SPILL OR OIL/FUEL ENTERING A WATERWAY, REFER TO THE ENVIRONMENTAL EMERGENCY RESPONSE PLAN (APPENDIX D).

REPORTING

* Report any issues (e.g. faulty equipment, recurring problems etc) to the Orion Contract Manager.
* Notify the Orion Contract Manager of any uncontained spill and complete and forward them a Spill Report (Appendix F) by the end of the next working day after the cleanup.

ROUTINE PLAN

B5. PORTABLE OIL/FUEL TANKS OR DRUMS

HANDLING

* Site Supervisor to establish tank/drum and equipment have no obvious leaks before leaving base.
* Site Supervisor to establish tank/drum has adequate security particularly if left on site overnight unsupervised.
* If the site is left unattended, the Site Supervisor must check all valves are in the off position unless supervised by a nominated responsible person working after hours.
* Site Supervisor to check that all valves are locked in the off position where the tank is outdoors.
* Have an appropriate spill kit readily available to manage any spills or losses.

SPILL MANAGEMENT

* Ensure personnel are safe.
* Remove anything that may lead to further damage.
* Stop or limit the flow from the portable tank/drum.
* Stop or limit the flow of oil/fuel into any stormwater drain or waterway by bunding with mop material.
* Spread mop-up material over effected area to absorb oil/fuel.
* Remove mop-up material from site and dispose of to an appropriate facility.
* If necessary, contact a waste management specialist (eg "Dakins") for containment and cleanup assistance.

IN THE EVENT OF A MAJOR UNCONTAINED SPILL OR OIL/FUEL ENTERING A WATERWAY, REFER TO THE ENVIRONMENTAL EMERGENCY RESPONSE PLAN (APPENDIX D).

REPORTING

* Report any issues (e.g. faulty equipment, recurring problems etc) to the Orion Contract Manager.
* Notify the Orion Contract Manager of any uncontained spill and complete and forward them a Spill Report (Appendix F) by the end of the next working day after the cleanup.

ROUTINE PLAN

B6. OIL FILLED EQUIPMENT E.G. TRANSFORMERS, SWITCHGEAR, CABLES ETC

OPERATION

* Establish equipment has adequate security. Before working on equipment, Site Supervisor to establish an acceptable method of oil containment.
* If the site is left unattended, the Site Supervisor must check all valves are in the correct position unless supervised by a nominated responsible person who is working after hours.
* Have an appropriate spill kit readily available to manage any spills or losses.

SPILL MANAGEMENT

* Ensure personnel are safe.
* Remove anything that may lead to further damage.
* Stop or limit the flow from the equipment.
* Close all valves.
* Stop or limit the flow into any stormwater drain or waterway by bunding with mop material.
* Spread mop-up material over affected area to absorb oil.
* Remove mop-up material from site and dispose of to an appropriate facility.
* Remove all oil that may spill from equipment into portable standby tank.
* If necessary, contact a waste management specialist (eg "Dakins") for containment and cleanup assistance.
* Refer to Routine Plan B1. Procedure for Emptying Water from Bunded Areas.

IN THE EVENT OF A MAJOR UNCONTAINED SPILL OR OIL/FUEL ENTERING A WATERWAY, REFER TO THE ENVIRONMENTAL EMERGENCY RESPONSE PLAN (APPENDIX D).

REPORTING

* Report any issues (e.g. faulty equipment, recurring problems etc) to the Orion Contract Manager.
* Notify the Orion Contract Manager of any uncontained spill and complete and forward them a Spill Report (Appendix F) by the end of the next working day after the cleanup.

APPENDIX C: SPILL RESPONSE KITS

C1. "SPORTS BAG" KITS

C1.1 Locations

ORION
Sports Bag Spill Response Kits, which are intended as a first attempt to limit any oil or fuel flow, will be kept in all Orion Network Operator vehicles.

CONTRACTORS
The Contractor shall be responsible for recording and tracking their spill response kits.

SUBSTATION INSPECTION CONTRACTORS
Zone Substations, Network Substations, and Distribution Substations

C1.2 Contents

These kits should contain the following:

- absorbent pads
- absorbent socks
- disposal bags

The user of these kits is to ensure that any items used are replaced as soon after the event as possible.

C2. MAJOR RESPONSE KITS

C2.1 Locations

Major Response Kits will be located typically where more than 5000L of diesel is being stored or where considered appropriate/required.

C2.2 Contents

A major response spill kit should contain:

- safety gear, such as gloves, overalls, goggles and respirators
- spill containment equipment, like drip trays, drain guards or barriers
- spill handling equipment like a broom and plastic shovel - metal ones could cause sparks, which is dangerous when dealing when flammable substances
- absorbent materials like dry sand, vermiculite, zeolite (cat litter) or spill containment socks
- a leak-proof container to put the waste in for disposal.

The user of these kits is to ensure that they advise the Orion Contract Manager of any items used so these may be replaced. The Major Response Kits are routinely inspected by Orion.

C3. DIESEL FUEL ABSORBENT SOCK KIT

C3.1 Location

A diesel fuel absorbent sock kit to limit diesel flow into stormwater drains or waterways is located in a bin on each diesel generator.

C3.2 Contents

This kit contains the following:

- Absorbent sock

The user of these kits is to ensure that they advise the Orion Contract Manager of any items used so these may be replaced.

APPENDIX D: ORION ENVIRONMENTAL EMERGENCY RESPONSE PLAN

ORION ENVIRONMENTAL EMERGENCY RESPONSE PLAN

The immediate action is to ensure people are safe and raise the alarm if necessary

EMERGENCY SPILL RESPONSE

Immediately notify Orion Control on 03 363 9890 and the Orion Contract Manager.

Where considered safe to do so:

* Remove anything that may lead to further damage.
* Stop or limit the flow.
* Close off valves where needed.
* Stop or limit the flow into any stormwater drain or waterway by bunding with mop-up material.
* Spread mop over affected area to absorb hazardous substance.
* Remove mop-up material from site and dispose of to an appropriate facility.
* If necessary, contact a waste management specialist (eg "Dakins") for containment and cleanup assistance.
* Where water in bunded areas needs to be released, refer to Routine Plan B1. Procedures for Emptying Bunded Areas.

FURTHER ACTION

* Orion Control to issue emergency job and notify Emergency Services if necessary.
* Orion Contract Manager to facilitate notification to Environment Canterbury “Pollution Hotline” (24hrs) Ph 0800 76 55 88 for waterway spills.

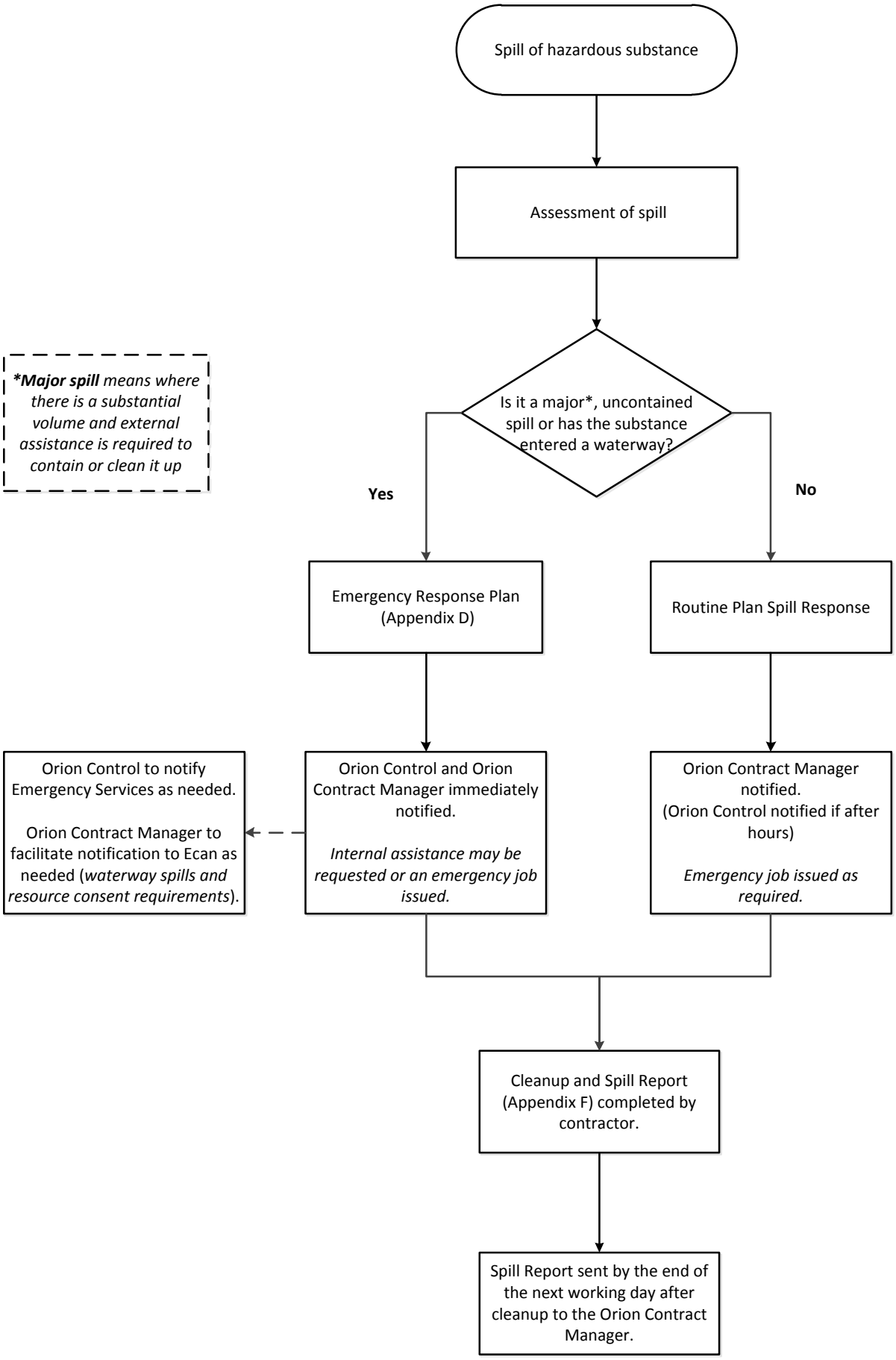
REPORTING

* Complete Spill Report (Appendix F) and forward to Orion Contract Manager by end of next working day after cleanup.

EMERGENCY FIRE RESPONSE

* Raise the alarm by calling 111.
* Notify Control on 03 363 9890.

APPENDIX E: SPILL RESPONSE FLOWCHART


Spill of hazardous substance
Assessment of spill
Is it a major*, uncontained spill or has the substance entered a waterway?
*Major spill means where there is a substantial volume and external assistance is required to contain or clean it up
Yes
No
Emergency Response Plan (Appendix D)
Routine Plan Spill Response
Orion Control to notify Emergency Services as needed.
Orion Contract Manager to facilitate notification to Ecan as needed (waterway spills and resource consent requirements).
Orion Control and Orion Contract Manager immediately notified.
Internal assistance may be requested or an emergency job issued.
Orion Contract Manager notified.
(Orion Control notified if after hours)
Emergency job issued as required.
Cleanup and Spill Report (Appendix F) completed by contractor.
Spill Report sent by the end of the next working day after cleanup to the Orion Contract Manager.

APPENDIX F: SPILL REPORT

SPILL REPORT

This report must be completed in the event of an uncontained spill of a hazardous substance. A copy of this report must be forwarded to the Orion Contract Manager by the end of the next working day after the cleanup.

DETAILS OF SPILL:

Location: _____ Date: _____ Time: _____

Substance Spilled: _____ Amount of Spill: _____ (Approx litres)

The cause of the spill: _____

_____

_____

Proximity of spill to waterway, stormwater drain or wetland: _____ (metres)

Did spill enter waterway, stormwater drain or wetland? Yes ☐ No ☐

If Yes, describe waterway/wetland and amount of spill that entered it: _____

_____

Action taken to contain spill: _____

_____

_____

Action taken to clean up spill: _____

_____

_____

Amount of soil removed: _____ (approx. m^3)

Site where contaminated material and/or removed soil disposed of (attach evidence e.g. docket):

_____

_____

Further actions required (e.g. on-site spill kit needs re-stocking): _____

_____

Please send through reinstatement photos with report.

Signed: _____ Date: _____

Print Name: _____ Position: _____