

Inquiry into a Sustainable Water Supply for Sydney

DEC Questions Taken on Notice

Question 1

Under 75H of the Act the Department of Planning is required to send copies of the submissions or a report of the issues raised in those submissions, made during the public exhibition of the Environmental Assessment of the Kurnell desalination plant.

Did DEC receive copies of the submissions or a report of the issues raised? Have any issues been raised that are of concern to the DEC?

Answer

The DEC did receive copies of the submissions. The issues raised in these submissions that were of concern to DEC were ones that the DEC had already raised in discussions with the Department of Planning and the proponent; and were also included in the DEC submission which was submitted at the end of the public consultation period.

Question 2

Chair: I understand if those types of waste materials are taken out of Sydney Water systems they actually go to the Lidcombe liquid waste plant. Is your organisation, which has oversight of such an important processing plant, able either now or on notice to give the Committee any assessment or details of the amount of waste that is actually released from the Lidcombe liquid waste plant into the sewerage system?

Ms. Corbyn: I could certainly give you information that we would have about what our licence conditions would be for the Lidcombe plant. I would have to take the question on notice, because I do not have that information off the top of my head.

Answer

DEC licences the Lidcombe Liquid Waste plant and the licence conditions are on the Public Register which can be accessed at <http://www.dec.nsw.gov.au/prpoeo/index.htm>. All wastes that are received at the plant are tested before any treatment. Wastes are then appropriately treated on site. Air emissions are minimal and are tightly controlled by licence conditions. The treated solid waste is suitable for disposal licensed solid waste landfills and residual liquid waste is discharged to sewer under a Sydney Water Trade Waste Agreement. Sydney Water has an intensive testing program for these waste discharges. Sometimes a small quantity of waste is not suitable for landfill or for discharge to sewer and is then sent to a hazardous waste treatment facility in Queensland.

Discharges to the sewerage system are regulated by Sydney Water under Trade Waste Agreements. The DEC regulates the SWC treatment system and licences the final discharge to ensure environmental standards are met. As DEC does not regulate discharges into the sewage system, information relating to discharges to the sewerage system from the Lidcombe Liquid Treatment Plant should be obtained from Sydney Water. The DEC regulates the SWC treatment system and licences the final discharge to ensure environmental standards are met.

Question 3

The Hon. Rick Colless: Do any other water authorities hold licences to discharge primary-treated sewage into ocean outfalls?

Ms. Corbyn: I do not know the answer to that question. I suspect that there are others. Do you mean in New South Wales?

The Hon. Rick Colless: I am referring to authorities in New South Wales.

Ms. Corbyn: I am sorry, but I will have to take that question on notice. Not that I am aware of, but I would need to check that. I do not know all the licence conditions for every sewage treatment plant on the coast.

Answer

Other than Sydney Water there are no sewerage authorities in New South Wales licensed to discharge 'primary' treated effluent from ocean outfalls.

Question 4

Ms. Corbyn: There are ocean outfalls at other centres.

The Hon. Rick Colless: Are you able to tell me where those are?

Ms. Corbyn: Up and down the coast there are a range of treatment plants that discharge to the ocean.

The Hon. Rick Colless: Primary Effluent?

Ms. Corbyn: As I say, I would have to check, because I do not know the detail of every treatment plant. We have had a study of the ocean outfalls for every sewage treatment plant up and down the coast. Again, we look at the environmental outcomes, and we assess it on the conditions for the circumstances of each particular plant. We have had more extensive analysis of Sydney Water's ocean outfalls than those of any other system. I am going by memory now, but I think it was a five- or ten-year program called the EMP – environmental monitoring program – for Sydney's ocean outfalls, and it demonstrates that there was not a significant concern. We want to ensure we have the upgrade programs progressed on a priority basis where there are issues of greater concern. Our emphasis has been on ensuring that we had upgrade of sewerage treatment plants for the Hawkesbury-Nepean, the mountains and some of those much more sensitive areas.

The Hon. Rick Colless: When the approval was given for some of the other coastal outfalls was it a condition that they had to be treated to a secondary or tertiary level?

Ms. Corbyn: I cannot answer that from memory. Ocean outfalls are obviously controversial and numerous communities do not want them. So there is a very extensive public consultation process for proposals from the north coast all the way down to the south coast.

Answer

All of the sewage treatment plants, outside of Sydney Water's responsibility, that discharge to the ocean are designed to treat sewage to at least 'secondary' effluent standards. The details of the

licences for these plants are on the DEC's public register. A number of these coastal treatment plants achieve 'tertiary' effluent standards.

Question 5

The Hon. Rick Colless: How much does Sydney Water pay you for the right to dump through ocean outfalls?

Ms. Corbyn: We have licence fees. Is that what you mean?

The Hon. Rick Colless : Yes

Ms. Corbyn: They go into consolidated revenue; we do not keep that revenue.

The Hon. Rick Colless: What fees do you levy?

Ms. Corbyn: I do not know the exact amount. I will have to take that question on notice. But I reinforce that the money does not come to us.

Answer

In 2004/05 (the most recent licence year), under the Load Based Licensing framework Sydney Water paid a total of approximately \$6.2 million in licence fees for discharge of treated sewage from its 10 sewage treatment plants that discharge to the ocean off Sydney and the Illawarra.

Question 6

Chair: Was the DEC consulted as to the adequacy of the EA between the period of lodgement with the DOP on 18 November 2005 and 24 November 2005 when the EA went on public exhibition?

Ms. Corbyn: Not that I am aware of, I think we have gone through a very standard process, if I can use that word. We were aware of, and certainly were consulted about, the pilot plant process. We knew the issues that are coming up for the pilot plant and we had an opportunity to identify the main categories of issues that we wanted to make sure of because they are very broad. As I said, they cover cultural heritage through to threatened species through to noise and water quality issues, et cetera. I do not have all the exact dates, but if you are asking were we consulted on the adequacy of the assessment before, I will need to come back to you specifically on that.

Chair: Yes, if you could take that on notice?

Ms. Corbyn: Yes, I am happy to do that. I know that we have been providing comments into the Department of Planning about our evaluation of the assessments through the standard process. We have provided comments in and we have asked for some improvements in some areas.

Answer

DEC had input into discussions with Sydney Water and Department of Planning through the Planning Focus Meeting; the development of the REF for the pilot plants and to the EA in terms of the issues DEC wanted to make sure Sydney Water covered.

Question 7

Chair: Post augmentation of the ocean outfall extensions and the impact on the sewage field of the extensions, that would have happened for a number of years. Would that have included any research or assessment of the bioaccumulation of toxic materials in fish and marine organisms?

Ms. Corbyn: I will need to come back to you with some of the detail, but I am pretty sure it did.

Chair: I would be very interested to know whether that is continuing, who is doing it and the method of reporting.

Ms. Corbyn: I know that we have stopped the Environmental Monitoring Program, but the results were such that that was appropriate to do. We did not need to continue to monitor. I will have to come back to you with what is incorporated into the EMP.

Answer

The monitoring of the impact of Sydney's three deepwater outfalls (North Head, Bondi and Malabar) between approximately 1989 and 1993 (the EMP) was a major \$10 million study that included assessment of the bioaccumulation of potentially toxic materials in fish and seabed sediments.

There was no evidence that the commissioning of the deepwater outfalls led to an increase of concern in the levels of contamination in offshore fish. The mean levels of contaminants in fish caught after the commissioning of the outfalls were generally low when compared to National Food Authority limits. Fish sampling and analysis was discontinued.

The EMP found some unexplained minor changes in abundances of certain organisms, including those that live on the seafloor near the outfalls. Further studies to monitor these organisms and the seabed sediments in which they live are continuing. The studies are undertaken by Sydney Water as a requirement in their sewage treatment systems licences, and results are reported annually. No trends of concern have emerged in the results to date.

Question 8

Ms. Sylvia Hale: Mr. Haddad. Approval was given in 1993 for the upgrade and whatever, presumably that approval would since have lapsed into the efflux of time?

Mr. Haddad: Not necessarily. I will just have to check because presumably that approval was given under what we call part five, which is a public authority. I am not sure there are lapsing provisions for public authorities as there are for the private sector. I will double-check on that if you want.

Chair: On that point, Ms. Corbyn, in terms of primary treated sewage going out from our ocean outfalls, does the Environment Protection Authority have a limit on suspended solids? My understanding would be that if it is over 60 per cent suspended solids you really would consider that to be third-world standard of treatment.

Ms. Corbyn: I will have to take that question on notice. I did not come with all the details of the sewage treatment. If you have asked me five years ago I probably could have told you the answer to that, but we do have a suspended solids limit on most of the sewage treatment plants. Where we do start truly is from an environmental outcome perspective, and on the ocean outfalls we looked at those impacts. We do not necessarily say everyone has to have a

standard level of treatment. We do not say everyone has to be tertiary, everyone has to be secondary or everyone can be primary. We actually look at the circumstances that we base according to the environmental outcomes, and priorities as well.

Answer

There are limits on the concentrations of suspended solids in treated sewage discharged from all 10 of Sydney Water's ocean discharging plants. The impact of suspended solids from the deep water outfalls was studied as part of the Environmental Monitoring program which found only minor changes to bottom dwelling organisms near the outfalls. Ongoing monitoring has confirmed no discernible trends in changes to aquatic organisms.